SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1912.

No. 783.

THE UNITED STATES, PLAINTIFF IN ERROR,

vs.

THE CHANDLER-DUNBAR WATER POWER COMPANY ET AL.

No. 784.

THE CHANDLER-DUNBAR WATER POWER COMPANY, PLAINTIFF IN ERROR,

vs.

THE UNITED STATES.

No. 785.

ST. MARY'S POWER COMPANY, PLAINTIFF IN ERROR,

vs.

THE UNITED STATES.

No. 786.

CLARENCE M. BROWN, SOLE RECEIVER OF THE MICHIGAN LAKE SUPERIOR POWER COMPANY, PLAINTIFF IN ERROR,

vs.

THE UNITED STATES.

IN ERROR TO THE DISTRICT COURT OF THE UNITED STATES FOR THE WESTERN DISTRICT OF MICHIGAN.

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1 United States District Court for the Western District of Michigan, Northern Division.

No. 638.

In the matter of the condemnation of all the lands north of the St. Marys Falls Ship Canal to the international boundary.

To the Clerk of the U. S. District Court, Western District of Michigan, Northern Division:

In the above-entitled matter you will please issue a writ of error from the United States Supreme Court to the United States District Court for the Western District of Michigan, Northern Division, and the entitlement of said writ should show the position of the parties in the United States Supreme Court as follows:

THE UNITED STATES, PETITIONER, PLAINTIFF IN ERROR,
vs.
THE CHANDLER-DUNBAR WATER POWER COMPANY, THE ST. Marys Power Company, the Michigan Lake Superior Power Company, Clarence M. Brown and Charles D. Warren as receivers of the Michigan Lake Superior Power Company, the Real Estate Trust Company, trustee, and the United States Mortgage & Trust Company, defendants in error.

2 And the position of the parties in the U. S. District Court for the Western District of Michigan, Northern Division, as follows:

In the matter of the petition of the United States for the condemnation of all the lands north of the present St. Marys Falls Ship Canal throughout its entire length and lying between said ship canal and the international boundary at Sault Ste. Marie, Michigan.

THE UNITED STATES, PETITIONER AND CONDEMNOR,
vs.
THE CHANDLER-DUNBAR WATER POWER COMPANY, THE MICHIgan Lake Superior Power Company, the St. Marys Power Company, Charles D. Warren and Clarence M. Brown as receivers of the Michigan Lake Superior Power Company, the Real Estate Trust Company, trustee, and the United States Mortgage and Trust Company, defendants and condemnees.

Respectfully,

R. T. STRICKLAND,
Special Asst. Atty. General.
F. C. WETMORE,
U. S. Attorney.
GRANT FELLOWS &
WM. K. CLUTE,
Special Asst. U. S. Attorneys.

Dated July 1st, 1912.

3 (Indorsed:) No. 638. United States District Court, Western District of Michigan, Northern Division. In the matter of the condemnation of all the lands north of the St. Marys Falls Ship Canal to the international boundary. Memorandum stating the position of the parties on the record. Filed July 1, 1912. Chas. L. Fitch, deputy clerk.

4 *Petition.*

5 THE UNITED STATES OF AMERICA.

The Circuit Court of the United States for the Sixth Circuit, Western District of Michigan, Northern Division.

In the matter of the condemnation of all lands and property of every kind and description north of the present St. Marys Falls Ship Canal throughout its entire length and lying between said ship canal and the international boundary line at Sault Ste. Marie, in the State of Michigan.

To the said court:

Your petitioner, the United States of America, a sovereign corporation, by George G. Covell, United States attorney, and William K. Clute, assistant United States attorney, in and for the Western District of Michigan, by direction of the honorable Attorney General, respectfully shows unto the court:

I.

That it is the owner and proprietor of the Saint Marys Falls Ship Canal and Locks located at the city of Sault Ste. Marie, Chippewa County, Michigan, adjacent to the Falls in St. Marys River, which ship canal and locks are operated, controlled, and regulated, and have been constructed and improved, and are now being improved and extended as provided by the laws of the United States, by the honorable Secretary of War, all of which has been and is now being done in aid of and for the improvement of the navigation of said St. Marys River, a connecting waterway in the system of the Great Lakes; and all of the administrative duties relative to such construction, repair, improvement, inspection, operation and superintendence is under the exclusive jurisdiction of the War Department and the Secretary thereof.

II.

Petitioner further shows unto the court that by sec. 11 of the act of March 3rd, 1909, being "An act to provide for the repair, maintenance, and preservation of public works on rivers and harbors and for other purposes," Congress determined and declared "That the ownership in fee simple absolute by the United States of all

6 lands and property of every kind and description north of the present Saint Marys Falls Ship Canal throughout its entire length and lying between said ship canal and the international boundary line at Sault Ste. Marie, in the State of Michigan, is necessary for the purposes of navigation of said waters and the waters connected therewith. The Secretary of War is hereby directed to take proceedings immediately for the acquisition by condemnation or otherwise of all said lands and property of every kind and description in fee simple absolute." * * *

III.

Petitioner further shows unto the court that the lands it is sought by this proceeding to have condemned is necessary for the public use for the purposes of navigation of said waters and the waters connected therewith, and are described as follows:

First description: All that part of private land claims Nos. 95 and 96, lying north of the northern boundary of the United States canal lands and described: Beginning at the intersection of the principal meridian of Michigan and the northern boundary of the United States canal lands, being 138.25 feet north of the intersection of the aforesaid principal meridian with the northern boundary of the United States canal grant; thence south 89° 40′ 21″ west along said boundary of the United States canal lands 327.73 feet, to the southeast corner of said tract, and the initial point of this description; thence north 41° 27′ west 214.96 feet to the north corner of claim No. 96; thence south 48° 33′ west 165 feet; thence south 44° 47′ east 33 feet; to the north corner of claim No. 95; thence south 45° 13′ west 43.46 feet; thence north 89° 40′ 21″ east 274.18 feet, to the place of beginning, containing .56 acre, more or less; together with all riparian and other rights appurtenant thereto, including all structures and appurtenances of every kind and description out to the international boundary line; and all rights reserved by the Chandler-Dunbar Water Power Company in deed dated January 22, 1908, conveying to the United States of America certain lands north of the St. Marys Falls Canal.

7 Second description: All that tract of land lying north of the northern boundary of the United States canal lands, including parts of village lot No. 3, Portage Street and the Indian reservation, the same being more particularly described by courses and distances as follows: Beginning at the intersection of the principal meridian of Michigan with the meander line of St. Marys River, being 59.4 feet north of the northern boundary of the United States canal grant; thence north 71° 39′ east 264 feet; thence north 4° 37′ west 240.9 feet, to the northwest corner of said tract, and the initial point of this description; thence south 4° 37′ east 226.55 feet; thence north 85° 23′ east 375.93 feet; thence north 89° 40′ 21″ east 1,821.5 feet; thence north 18° 39′ west 135.96 feet; thence north 80° 40′ west 109.56 feet; thence south 88° 15′ west 264.66 feet; thence

north 84° 41′ west, 267.96 feet; thence south 85° 23′ west 198 feet; thence north 89° 54′ west 264.66 feet; thence south 79° 57′ west 265.32 feet; thence north 69° 19′ west 291.72 feet; thence south 87° 56′ west 533.94 feet, to the place of beginning, containing 8.3 acres, more or less. Together with all riparian and other rights appurtenant thereto, including all structures and appurtenances of every kind and description, out to the international boundary line; and all rights reserved by the Chandler-Dunbar Water Power Company in deed dated January 22, 1908, conveying to the United States of America certain lands north of the Saint Marys Falls Canal.

Third description: All that tract or parcel of land lying north of the St. Marys Falls Canal and designated on the accompanying map as Portage Street, and described as follows: Beginning at the intersection of the principal meridian of Michigan and the northern boundary of the United States canal grant; thence north 85° 23′ east 1,202.52 feet along said boundary line to its intersection with the northern line of Portage Street, the initial point of this description; thence north 77° 10′ west 990 feet; thence south 4° 37′ east 69.3 feet;
thence south 77° 10′ east 759 feet; thence north 85° 23′ east
8 219.73 feet, to the place of beginning, containing 1.326 acres, more or less, together with all riparian or other rights appurtenant thereto, including all structures and appurtenants of every kind and description, out to the international boundary line.

Fourth description: A. All that part of village lot No. 3 described as follows: Beginning at the intersection of the principal meridian of Michigan and the meander line of the St. Marys River, according to the so-called Whelp'ey survey of 1854–1855, being 59.4 feet north of the northern boundary of the United States canal grant; thence north 71° 39′ east 70.2 feet to the west corner of said tract and the initial point of this description; thence south 84° 15′ 38″ east 49 feet; thence north 82° 6′ 59″ east 40.7 feet; thence north 14° 3′ east 32.44 feet; thence south 71° 39′ west 102.14 feet, to the place of beginning, containing .032 acre, more or less, together with all riparian or other rights appurtenant thereto, including all structures and appurtenances of every kind and description, out to the international boundary line.

B. Also a strip of land and all rights thereto, 100 feet wide, 50 feet on each side of the center line of the route adopted by Sault Ste. Marie Bridge Company, from the meander line of St. Marys River to a point in the said center line and distant 700 feet, measured on said center line, from north side of the St. Marys Falls Ship Canal as it existed in 1887. The center line of the route of said company has a course 14° 3′ east, and passes through a point in the meridian line of the State of Michigan distant 61.85 feet north from the north line of Portage Avenue (formerly known as Canal Street) in the city of Sault Ste. Marie, containing .56 acre, more or less.

Fifth description: A certain island near the foot of St. Marys Falls on the American side, and known as the island of Chief O'Shaw-waw-no, and being the same ceded to Chief O'Shaw-waw-no

by the United States Government, but designated on Whelpley
9 survey and the accompanying map as Island No. 5, and containing .361 acre, more or less. Together with all riparian rights appurtenant thereto, including all structures and appurtenances of every kind and description, out to the international boundary line. Accompanying this petition is a plat filed in this court of the premises setting forth these separate parcels of land.

IV.

Your petitioner further shows that the persons and corporations owning, or having an interest in said lands and property, so far as disclosed by the records of titles of the county of Chippewa, Michigan, in which the same are situated, or from actual occupancy, are as follows:

First description: Claimed to be owned in fee simple or having some right, title, or interest therein, by the Chandler-Dunbar Water Power Company, the Saint Marys Power Company, and the Edison-Sault Electric Company, each corporation created and existing under the laws of the State of Michigan; William Chandler and Harris T. Dunbar.

Second description: Claimed to be owned in fee simple, or having some right, title, or interest therein, by said Chandler-Dunbar Water Power Company, the said Edison-Sault Electric Company, and the Sault Ste. Marie Bridge Company, a corporation created and existing under the laws of Michigan, William Chandler, Harris T. Dunbar, and the Standard Trust Company of New York, a corporation created and existing under the laws of the State of New York.

Third description: Claimed to be owned in fee simple, or having some right, title, or interest therein by the city of Sault Ste. Marie, a municipal corporation created and existing under the laws of Michigan, and the said Chandler-Dunbar Water Power Company.

10 Fourth description: Claimed to be owned in fee simple, or having some right, title, or interest therein, by the Sault Ste. Marie Bridge Company, Chandler-Dunbar Water Power Company, and Edison-Sault Electric Company.

Fifth description: This island is claimed to be owned in fee simple by the said Saint Marys Power Company, and it is also claimed to be owned in fee simple by the United States; this title is now in litigation in this court.

V.

Your petitioner further shows unto the court that this application is made for the purpose of acquiring by the United States the title in fee simple, clear of all clouds or incumbrances, to all the lands, rights, and property above described for use of the United States for navigation purposes, and that the acquisition thereof was authorized and appropriation made therefor by the said act of March 3rd, 1909, 35th U. S. Stat., p. 820-1-2, and also by act of March 2nd, 1907,

pt. 1, vol. 34, U. S. Stat., p. 1098, and the construction of said new canal and lock was therein authorized and the work is now under way. Accompanying this petition there is filed a blue print map showing said lands to be acquired for said new lock and canal as made by the U. S. Engineer's office at Sault Ste. Marie, Michigan, under the direction of Lieut. Col. C. McD. Townsend, Corps of Engineers, U. S. A.

VI.

Petitioner further shows unto the court that Hon. J. M. Dickinson, Secretary of War, has heretofore filed in the office of the register of deeds of Chippewa County, Michigan, a writing—that is to say, a notice, to whom it might concern—stating that said lands and property above described, together with other lands and property, describing it, are taken under the provision of sec. 11 of said act of Mch. 3rd, 1909, for the purpose of aiding, facilitating, and improving the navigation of the waters of St. Marys River, the same being public navigable waters of the United States, and in the establishment, construction, maintenance, and operation of
11 suitable canals and locks and the appurtenant public works incident thereto and the exclusive control over the same for the purpose of said navigation as now provided by Congress—which notice for greater certainty will be produced and proved as this court shall direct. That thereafter said notice was published in two of the newspapers published and circulating in the city of Sault Ste. Marie aforesaid—that is to say, the Evening News and the Soo Times—on, to wit, the 15th day of January, A. D. 1910. That thereafter the Secretary of War took possession of said lands and caused the same to be taken of all the property above described, and is proceeding with said public works thereon as authorized by Congress for the uses of navigation.

VII.

Petitioner further shows that there are sufficient funds available for the payment of an award for a reasonable valuation of said lands and property.

VIII.

Petitioner further shows unto the court that it has caused efforts to be made to purchase the same lands and property above described from the owners and those having interests therein, but has been unable to acquire the title thereto by purchase.

IX.

Petitioner therefore prays that said lands and property may be condemned under the process and proceedings of this court for the public uses aforesaid, and that a jury be empaneled or a commis-

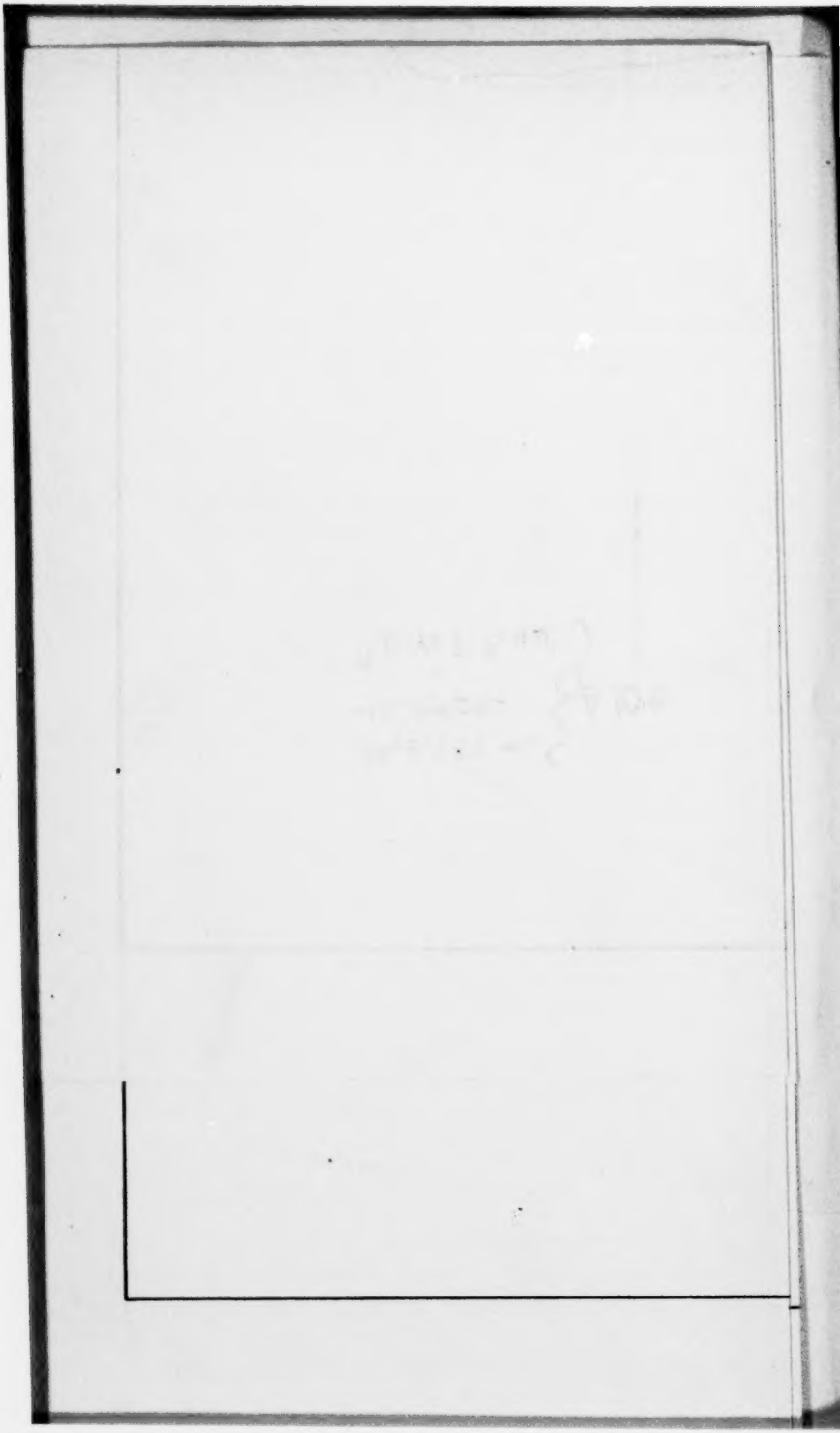
MAP

TOO

LARGE

FOR

FILMING



sion appointed by order of this court for an inquiry and assessment of the compensation to be paid by the United States for said lands and properties, or that said inquiry and assessment be made by this court, and that the title in fee simple thereto may be acquired, confirmed, and established in the United States of America upon payment by it of the just and due compensation found to be due to the respective owners and others interested therein, and that the said
Chandler-Dunbar Water Power Company, the Saint Marys
12 Power Company, the Edison-Sault Electric Company, the City
of Sault Ste. Marie, the Sault Ste. Marie Bridge Company, William Chandler, Harris T. Dunbar, and the Standard Trust Company of New York, may be summoned to appear before this honorable court and answer this petition and show cause, if any they have, against the same.

X.

Petitioner further shows that the Standard Trust Company of New York is a nonresident corporation, and resides and has its principal office at 25 Broad Street, New York City, New York, and that Harris T. Dunbar resides at 1248 Main Street, in the city of Buffalo, State of New York, and is a nonresident of Michigan, and that service of a summons cannot be obtained upon them in this district. It is therefore respectfully asked that the court make an order to the effect that the summons issued herein for their appearance may be served upon them in the places of their respective residences by the U. S. marshal of the respective districts where they do reside, and that the proof of service thereof be made by affidavit of the officer serving the same.

THE UNITED STATES OF AMERICA,
By GEORGE G. COVELL,
U. S. Attorney.

WESTERN DISTRICT OF MICHIGAN,
Southern Division, ss:

GEORGE G. COVELL, being duly sworn, deposes and says that he has read the foregoing petition and knows the contents thereof; that he is attorney for the United States in this district, and makes this affidavit in behalf of petitioner; that the facts therein set forth are true according to the best of his knowledge, information, and belief.

GEORGE G. COVELL.

13 Subscribed and sworn to before be this 21st day of April, A. D. 1910.

[SEAL.] CHAS. J. POTTER,
Clerk U. S. Dist. Court, Western Dist. Mich.

[Here follows map marked p. 10a.]

(Endorsed:) No. 638. In the Circuit Court of the United States 10r the Western Dist. of Mich. No. Div. In re condemnation of lands to international boundary for St. Marys Falls Ship Canal.

Petition of the United States. Filed Apr. 25, 1910. Chas. L. Fitch, clerk. Geo. G. Covell. U. S. attorney, & Wm. K. Clute, asst. U. S. atty., for petitioner.

14 *Answer of Chandler-Dunbar Company.*

15 THE UNITED STATES OF AMERICA.

The Circuit Court of the United States for the Sixth Circuit, Western District of Michigan, Northern Division.

In the matter of the condemnation of all lands and property of every kind and description north of the present Saint Marys Falls Ship Canal through its entire length and lying between said ship canal and the international boundary line at Sault Ste. Marie, in the State of Michigan.

UNITED STATES OF AMERICA, PETITIONER,
vs.
CHANDLER-DUNBAR WATER POWER COMPANY, William Chandler, Harris T. Dunbar, and the Edison Sault Electric Company, impleaded with others, respondents.

Now come the respondents, the Chandler-Dunbar Water Power Company, William Chandler, and Harris T. Dunbar, and jointly answer the petition of the United States in the above-entitled matter, and for such answer allege that—

I.

The allegations in Section I of petition are true, as they are informed and believe.

II.

Congress did enact in the language stated in Section II, but Congress did not intend by such enactment to declare that the ownership in fee simple absolute by the United States of all lands and property of every kind and description north of the present St. Marys Falls Canal throughout its entire length and lying between said ship canal and the international boundary line at Sault Ste. Marie, in the State of Michigan, is necessary for the purposes of navigation
16 of said waters and the waters connected therewith, but only that parts of said property are necessary for the purposes of navigation, and that such parts are so intimately connected with the parts that are not so necessary, and that the necessary works to be built upon the parts necessary have such relation to the parts of the property not necessary, that it is competent and wise for the United States to take the whole of said property for the primary purpose of improving navigation, although to a very large extent

and for the most part the property so taken can only be applied to private purposes.

If Congress did intend to assert by such Section II that the ownership in fee of all of such property is necessary for the purposes of navigation, such assertion is not true. Only a small part thereof is necessary for that purpose.

III.

Answer to Section III of petition: It is not true "that the lands it is sought by this proceedings to have condemned are necessary for the public use for the purposes of navigation," although it is true that certain parts of said lands are necessary for public use for that purpose and that such parts of such lands are so connected with other parts of said lands and appurtenances, and the improvements required for the purposes of navigation upon such parts bear such relation to the uses of the parts not necessary to be taken, that the United States may condemn the entire property for the primary purpose of navigation, although a very large part thereof can be used only for private purposes.

The respondent, the Chandler-Dunbar Water Power Company, is the owner in fee simple of "all that part of private land claims Nos. 95 and 96 lying north of the northern boundary of the United States canal lands" and described in Section III of the petition, "together with all riparian and other rights appurtenant thereto, including all structures and appurtenances of every kind and description, out to the international boundary line, and all rights reserved by the Chandler-Dunbar Water Power Company in deed, dated January 22, 1908, conveying to the United States of America certain lands north of the St. Marys Falls Canal."

17 The respondent, the Chandler-Dunbar Water Power Company, is also the owner of "all that tract of land lying north of the northern boundary of the United States canal lands, including parts of village lot No. 3, Portage Street, and the Indian reservation," so called, as described in the second description of Section III of the petition, "together with all riparian and other rights appurtenant thereto, including all structures and appurtenances of every kind and description out to the international boundary line, and all rights reserved by the Chandler-Dunbar Water Power Company in deed, dated January 22, 1908, conveying to the United States of America certain lands north of the St. Marys Falls Canal," subject only to the right of way of the Sault Ste. Marie Bridge Company to maintain the international bridge, so called, and its line of railway over said lands, as described in subdivision b of the fourth description of Section III of the said petition; and also subject to the right of the city of Sault Ste. Marie to use for street purposes the land described as Portage Street (if such right exists, which these respondents deny), such Portage Street being the lands designated in the third description in Section III of the petition: and

also the right of the Edison Sault Electric Company to keep and use a part of the same for the time and on the terms and conditions specified in a certain lease thereof made by the Chandler-Dunbar Water Power Company to said the Edison Sault Electric Company, on the 19th day of January, 1892, a copy of which lease, excepting only the parts relating to the execution and acknowledgement thereof, is hereto annexed, marked Exhibit "A," which lease was on the first day of May, 1905, modified by writing, a copy of which modifying agreement, excepting only the parts relating to the execution and acknowledgement thereof, is hereto annexed, marked Exhibit "B."

Said respondent, the Chandler-Dunbar Water Power Company, is also the owner of "that part of village lot No. 3" described in subdivision a of fourth description of Section III of the petition of the United States, "together with all riparian and other rights appurtenant thereto, including all structures and appurtenances of every kind and description out to the international boundary line."

These respondents have no interest in the lands described in the fifth description of Section III of the petition.

18 IV.

These respondents are informed and believe that the ownership of the lands in first description, second description, and third description, and fourth description, mentioned in Section IV are as hereinbefore stated. These respondents have no interest in the lands described in the fifth description, as stated, and deny that the Saint Marys Power Company has any right or title in and to the lands in the first description.

V.

These respondents concede that "This application is made for the purpose of acquiring by the United States the title in fee simple, clear of all clouds or incumbrances, to all lands, rights, and property," described in the petition, for the use of the United States. Such use is primarily for the purposes of navigation. But the United States seeks also to acquire the same for the purposes of the incidental private use of the water power for pecuniary profit to the United States.

The acquisition thereof was authorized by act of March 3, 1909, and the act of March 2, 1907, but the appropriation made therefor by said acts is not sufficient to pay the value thereof.

VI.

The statement in Section VI of the petition is true, as these respondents are informed and believe.

VII.

These respondents are informed and believe that there are not sufficient funds available for the payment of an award of a reason-

able valuation of said lands and property, but they concede that the pledge of the faith of the United States for the payment of the damages which may be awarded is a sufficient fund to justify the proceeding to condemnation.

VII.

The efforts to purchase the lands and property of the respondent, the Chandler-Dunbar Water Power Company, described in said petition, including the property of the Edison Sault Electric Company, consisted of an offer of only $375,000.00 therefor by the War Department. The true value of the same is very much in excess of that amount.

19

IX.

Wherefore the respondent, the Chandler-Dunbar Water Power Company, prays judgment herein against the United States for the amount of the just compensation for its property sought to be condemned and interest thereon from the time of the filing of the petition for taking herein.

THE CHANDLER-DUNBAR WATER POWER COMPANY,
By WILLIAM CHANDLER, *President.*
WILLIAM CHANDLER.

A. B. ELDREDGE,
Att'y for Respondents above named.
MOSES HOOPER,
JOHN H. GOFF,
Of Counsel.
HARRIS T. DUNBAR,
By J. H. GOFF,
Of Counsel.

20

EXHIBIT "A."

This indenture made this 19th day of January, A. D. 1892, between the Chandler-Dunbar Water Power Company, a corporation organized and existing under the laws of the State of Michigan (hereinafter called the lessor), party of the first part, and the Edison Sault Electric Company, a corporation organized and existing under the laws of the State of Michigan (hereinafter called the lessee), party of the second part, witnesseth:

Whereas the lessor is the owner of the water power and the land on the north side of the Government ship canal between that canal and the rapids of the St. Marys River (now known as the Edison canal property) and contemplates improving the same, thereby greatly increasing the development of the water power;

Whereas the lessee desires to lease the land hereinafter named, together with the water power hereinafter referred to;

Now thereof, this instrument witnesseth that the said Chandler-Dunbar Water Power Company for and in consideration of the rent hereinafter reserved, and of the agreements hereinafter contained, to be done and performed has demised and leased and to farm let, and does hereby demise, lease, and to farm let unto the Edison Sault Electric Company the following described land situated in the city of Sault Ste. Marie, county of Chippewa, in the State of Michigan, to wit:

"Commencing at the southeast corner of the tract of land on the north side of the United States ship canal reservation and lying between that reservation and the St. Marys River, and shown on the official maps as the Indian Reservation, and running thence westerly on the line of said canal reservation one hundred and fifty (150) feet, thence northerly on a line perpendicular to the aforesaid line two hundred (200) feet; thence easterly on a line parallel to the said canal reservation on line one hundred and fifty (150) feet, thence southerly on a line perpendicular to the aforesaid canal reservation line two hundred (200) feet to the point of beginning."

To have and to hold, the above described land and water power unto the lessee its successors and assigns for and during the term of eighty years, commencing on the first day of November, A. D. 1891, and terminating on the fifth day of November, 1971, unless
21 an end shall be put hereto before that time under the terms hereof.

And as and for the rent for said premises and water power the lessee hereby covenants and agrees to pay the lessor, for such power as may from time to time be used by it, rentals as follows:

(a) No rentals whatever shall be payable during the existence of this lease for the power used by the lessee up to and including one hundred and fifty (150) horsepower and the amounts of horsepower hereinafter mentioned, for which rentals shall be payable, are amounts furnished and used exclusively and in excess of the said one hundred and fifty (150) horsepower.

(b) For all power furnished and used by the lessee not exceeding four hundred (400) horsepower (exclusive as aforesaid), the lessee shall pay during the first twenty years of this lease the sum of $16.66 per horsepower per year.

(c) For all power furnished and used by the lessee over and above said four hundred (400) horsepower (exclusive as aforesaid) the lessee shall pay during the first twenty years of this lease the sum of $12.00 per horsepower per year.

(d) For all power furnished and used by the lessee (exclusive of the 150 horsepower aforesaid) after the expiration of the first twenty years of this lease, the lessee shall pay such sum per horsepower per year for the respective succeeding period of twenty years as may be determined to be proper as hereinafter provided for.

The lessor covenants that within a reasonable time the said property shall be so improved as to be able to supply at least eleven hundred and fifty (1150) horsepower. Should the lessee require at

any time during the continuance of this lease power additional to said eleven hundred and fifty (1150) horsepower, it may notify the lessor of the additional amount required, and if the lessor then has that amount of horsepower produced and unappropriated, it shall furnish the same to the lessee. If such additional horsepower is not then available for the use of the lessee as herein provided, the lessor shall, within one year from such notice, if practicable, make such improvements and extensions of its water power system
22 as shall produce the desired additional horsepower.

Provided, however, That if the said lessee shall give the notice aforesaid to the lessor of its desire to use additional power which the said lessor shall not then have available, and if the said lessor and lessee shall not agree as to the practicability of making improvements and extensions of the lessor's water-power system necessary to give the lessee the horsepower desired, then in that case the question as to whether it is practicable to make such improvements and extensions shall be submitted to arbitration. Each party hereto shall choose an arbitrator, which arbitrators shall select a third, and the three arbitrators acting together shall determine the question of the practicability of making such improvements and extensions necessary to furnish the power desired by said lessee; and the decision of any two of said arbitrators shall be binding and final, and the parties hereto each agree to submit to said decision when so rendered; and

Provided further, That if the lessor provide the number of horsepowers required under the notice of the lessee as aforesaid, by making improvements upon its works, the lessee shall pay for, as above provided, the entire number of horsepower so required and provided, whether immediately used or not.

All rents for water power as herein stated shall be due and payable on the first days of January, April, July, and October of each year during the continuance of this lease.

The rentals payable under subdivision (d) above contained shall not be less than $12.00 per horsepower per year nor more than $20.00 per horsepower per year if the parties themselves cannot agree on such rentals, then the annual rental for the second period of twenty years shall be fixed at least six months before the expiration of the said first period of twenty years, in the following manner, to wit:

Each party hereto shall choose an arbitrator, who shall appraise the annual rental value of the premises hereby leased, including the water power used, based on its true value at Sault Ste. Marie, leaving out of consideration all improvements, buildings, ma-
23 chinery, and good will of business, placed or carried on, on said leased land by the lessee and its predecessor company; and if said arbitrators cannot agree, the two shall choose a third arbitrator, and then the decision of any two of said arbitrators shall be binding, and the annual rental thus fixed shall be the annual rental to be paid for each year of such second period of twenty

years, and the same shall be paid in quarterly installments as aforesaid. The rental shall, however, in no case be fixed higher than $20.00 per horsepower nor lower than $12.00 per horsepower per year. §A like course shall be pursued in determining the rental for the third and fourth periods of twenty years.

Each horsepower as mentioned in this agreement is construed to be the right to draw from the canal or canals or water course of the lessors during the entire twenty-four hours of each and every day sixty-six cubic feet of water per minute when the head and fall is eight feet; and in order to prevent disputes as to the power which is furnished in the variations of the height of water from the changes of seasons or other causes or the increase of fall caused by improvements made by the lessor, it is understood and declared that the volume of water shall be increased or decreased in proportion to the variation in the height of water, in order to furnish at all times the same amount of power irrespective of such variations. It is also agreed that the lessor, or its agent, or its engineer may at all seasonable times, in a peaceable manner, after the notice to the lessee or agent in charge, enter the race way thereof to measure and compare the quantity of water used with the quantity granted; and in the measurement all unnecessary wastage shall be included, and such modes may be adopted of varying the measurements as circumstances may require.

And the lessor, in consideration of these premises, covenants and agrees to and with the lessee that the said lessor is the lawful owner in fee simple of the land hereby demised, and that the same is free and clear of all liens and encumbrances whatsoever, excepting a pending suit of Spalding vs. Chandler, and that the lessor has a good, right, and lawful authority to sign, seal, and deliver
24 this lease, and that the said proposed water-power improvements shall be completed to the capacity of five hundred and fifty horsepower at the station of the lessee at as early a day as is practicable, and not later than the first day of December, A. D. 1892.

The water power leased hereunder with the land in connection therewith, together with the buildings erected and to be erected thereon, shall be used by the lessee in the production of and transmission of electricity in its various forms and for no other purpose whatever, except by the written consent of the lessor: Provided, That the foregoing agreement shall not prohibit the lessee from setting up and using machines and machine shops for making and repairing machinery and articles for use in its own business. It is also further understood and agreed that the lessor shall not lease, sell, convey, or permit to be sold, used, or conveyed any water or water powers from any of its canals or reservoirs for the purpose of generating, producing, or transmitting electricity in any form whatever, either directly or indirectly, so long as this lease is alive and in force. But nothing herein contained shall be construed to prevent the lessor from leasing and selling water power for any and all other purposes. Provided, however, That before any water power

is leased hereunder the lessor shall notify the lessee in writing, and the lessee shall within thirty days have the right to take such water power or any portion thereof absolutely required by the lessee for the purposes of its business at the lowest price paid for horsepowers under this lease at the time such water is taken, the lessee paying for said water power thus taken whether used by it or not. Each lease of water power made by the lessor shall be known and designated by consecutive numbers, of which this lease is number one; and in case the water in the main reservoir or canal shall fall (so that it is not furnishing to the lessee the number of horsepowers required and contracted for as herein agreed upon), the lessor shall itself or by its agent or engineer shut down the gates of the lessees of water power in the reverse order of their number, beginning
25 at the highest number, sufficient to maintain the water in the reservoir or canal at the said point named.

The lessor is to construct and maintain in good repair the canals and embankment dams and from time to time, as the case may require, it is to remove and to clear out obstructions which may accumulate therein, always excepting ice. It is also to maintain its embankments and cribs in such a manner and at such height as will keep the water in the canals and reservoirs at the highest point practicable with the level of the water in Lake Superior and the St. Marys River.

The lessee's head and tail races, as these are ordinarily understood, shall be constructed and kept in good repair by the lessees during the term of this lease, and every flume, penstock, raceway, or tail race shall be constructed in such a manner as shall be approved in writing by the lessor's engineer or manager, so as to make the same safe and to secure the greatest economy in the use of water, and to admit of the most satisfactory measurements and comparison, and so as to allow repairs to be easily made, and the lessess shall be bound to the exercise of reasonable diligence in making repairs after notice thereof in writing by the lessor's engineer or manager, and if the lessee fail to so repair after notice the water may be shut off from its flume by the lessor, after five days' notice in writing, until the default thereunder is complied with, the rental meanwhile to continue; and the lessee is also to maintain a satisfactory gate at the head of its flume or flumes so constructed as to be closed, thereby preventing the water from flowing into the flume, and the lessor reserves the right to place a sill across the mouth of each tail race at or below the lowest low-water mark, the same to be put in so as to obstruct the flow of water as little as possible. The lessee is not to use more water than granted, nor unnecessarily waste it, nor permit it to be unnecessarily wasted for want of repairs or through deficiency of its works or otherwise, and if so wasted, or if more to be used than granted, on given by its engineer or manager notice in writing as aforesaid, and in case of the failure of the lessee
26 to stop such unnecessary use or waste, the lessor may, after five days' notice, stop the water from entering the flume by closing the gates across them or by any other method until such

waste or excessive use be sufficiently guarded against, and may also at the same time maintain its action at law for damages for the injury so inflicted upon it.

If the lessee shall fail to pay the rent reserved for the space of sixty days next after any of the said days of payment as aforesaid, the same being first lawfully demanded, or shall fail to observe, perform, fulfill, and keep all and every the covenants, conditions and restrictions, matters and things herein contained on the part and behalf of the lessee to be observed, performed, fulfilled, and kept, then and from thenceforth, in either of said cases, it shall and may be lawful for the lessor into the demised premises or any and every part thereof, in the name of the whole, to reenter and the same to have again, repossess, and enjoy as of their former estate therein, and the lessee and of the demised powers thereout and from thence expel, put out, and remove, and from and after such reentry made the lease for water power shall cease, determine, and be utterly void. And it is further agreed by and on the part of the lessee that the said lot or parcel of land described in this lease, together with all the buildings, erections, and improvements thereon, shall be, and the same are hereby, mortgaged and conveyed to the said lessor as a continuing security for the payment of the rent hereby reserved and for the faithful performance of all and singular the covenants and conditions herein contained to be kept and performed by the lessee.

If the lessee shall sustain any injury from deficiency of water power from causes not arising from its own negligence or misconduct, its rent for such deficiency may cease during the time such deficiency may continue, but no longer; the lessee shall pay rent for so many horsepowers as shall remain, notwithstanding such deficiency; and if the deficiency shall happen through the misconduct or wilful neglect of the lessor, and which may be removed or
13 remedied, and the lessor, after due notice to that purpose, unreasonably fail to remove the obstructions or remedy the mischief, the lessee may, in the best manner it may be able, remove or remedy the cause of injury, and to pay and indemnify itself for the expense and charge thereby incurred the lessee shall, at the expiration of thirty days from the time the amounts of such expenses shall have been adjusted and agreed to by the parties or ascertained by final judgment of law, or by award of referees, have a lien upon all the rents which may have been reserved to the lessee upon the sale of any horsepowers and which may become payable after the expiration of said thirty days, and may demand, sue for, and retain the same until it may be fully reimbursed as aforesaid; but in no case shall the lessor be liable for any damage growing out of the action of the elements, the act of God, or the public enemy, when the lessor is not guilty of neglect hereunder.

The said lessor shall also have the right at any time during the continuance of this contract to make such use of the land and premises hereby leased as may be expedient for the further or full devel-

opment of its water power, not inconsistent with the rights of the lessee under its lease. And to that end may enter upon said premises, extend railways or tramways upon and haul materials over or upon the same, construct dams, dikes, or embankments thereon, and do any work of like nature tending to the improvement of said water power; provided, however, that such work shall be so conducted as not to abridge or interfere with the lessee's full use and enjoyment of said premises for all purposes specified in said lease.

The lessor shall have the right, subject to approval in writing of its lessees having, holding, and leasing a majority of the horsepower from time to time in use from its canals and reservoirs, to make all needful rules and regulations in regard to fire risks and for the general welfare and safety from floods and all other providential acts, and when said rules have been adopted and approved of by a majority of the lessees in writing and duly recorded in the office of the register of deeds for Chippewa County, Michigan,
14 the same shall form a part of this lease and be binding upon the lessees; provided, however, that nothing in said rules and regulations shall conflict in any manner with any of the conditions of this lease.

All buildings erected by the lessee upon the land hereby leased shall be built of stone or brick and be covered with slate or such other material as the lessee and lessor may mutually agree upon, and the covering shall be well secured against fire, and the lessor covenants and agrees that all its other lessees shall be similarly bound to observe this provision.

The land hereby leased shall be used by the lessee for its necessary buildings, including offices, storehouses, and such other outhouses as may be required for the accommodation of its business, but shall not be appropriated to any other purpose whatever without the written consent of the lessor. It is also further understood and agreed that the lessee cannot sublet any of the land or water power herein leased without the written consent of the lessor.

It is expressly agreed that the lessee shall have the right to remove all of its buildings, machinery, and fixtures from the land hereby leased at the termination of this lease by the lapse of time or otherwise under the terms of this lease, or at the lessee's election to dispose of the same to other parties satisfactory to the lessor; and the lessee covenants and agrees that it will at the termination of this lease by the lapse of time or otherwise under the terms hereof, quit and deliver up the said leased land to the lessor peaceably and quietly.

As the principal canals and reservoirs of the lessor are yet to be completed, it is expressly agreed that notwithstanding anything in the lease contained the rental for water power herein provided shall not begin until the completion of the works of the lessor in such a shape as to furnish more water power than is at present provided by the canal already constructed.

Neither shall the lessor be liable to maintaining the present canal as aforesaid free from obstructions or otherwise until such time

29 as the rental shall commence, anything contained herein to the contrary notwithstanding.

The lessee shall, during the life of this lease, pay all taxes and assessments lawfully levied or assessed upon the real estate hereby demised and upon the buildings or appurtenances placed thereon by the lessees and save the lessor harmless therefrom beginning with the taxes for the year 1892; but the lessor shall pay all taxes and assessments levied on the water power and the water-power canal and save the lessee harmless therefrom.

Further, it is expressly agreed between the parties hereto that all the covenants, agreements, and undertakings in this lease contained shall extend to and be obligatory upon the respective parties hereto the same as if the words "successor" and "assigns" were in fact added and inserted hereinafter the words lessor and lessee wherever those words occur, or any other words indicating the party of the first part and the party of the second part hereto, and that all the covenants and agreements herein contained shall be and are construed to be covenants running with the land.

In witness whereof * * *.

30 EXHIBIT "B."

This indenture made this first day of May, A. D. nineteen hundred and five, between the Chandler-Dunbar Water Power Company, a corporation organized and existing under the laws of the State of Michigan (hereinafter called the lessor), party of the first part, and the Edison Sault Electric Company, a corporation organized and existing under the laws of the State of Michigan (hereinafter called the lessee), party of the second part, witnesseth:

Whereas the parties hereto are parties to an indenture made January nineteenth, eighteen hundred and ninety-two, whereby certain land and certain water power is demised and leased and to farm let by the said Chandler-Dunbar Water Power Company unto the said Edison Sault Electric Company.

And whereas it now appears that the United States Government desires to acquire for public purposes the land so demised and leased, to wit: a piece of land two hundred (200) feet by one hundred and fifty (150) feet situated in the southeast corner of the Chandler-Dunbar Water Power property on the north side of the United States ship canal reservation between that reservation and the rapids of the St. Marys River.

And whereas the Chandler-Dunbar Water Power Company desires and the Edison Sault Electric Company consents that for and in place of the aforesaid piece of land there shall be substituted for the use and occupation of the Edison Sault Electric Company a certain other piece of land mutually agreed upon, being the piece of land hereinafter described.

Now, therefore, this instrument witnesseth that the said Chandler-Dunbar Water Power Company, for and in consideration of the sum

of one dollar ($1.00) to it in hand paid, receipt whereof is hereby acknowledged, and of the agreements hereinafter contained, and of
31 the agreements contained in the aforesaid indenture made on the nineteenth day of January, eighteen hundred and ninety-two, between the parties hereto, to be done and performed, has demised and leased and to farm let and does hereby demise, lease and to farm let unto the Edison Sault Electric Company the following described land situated in the city of Sault Ste. Marie, county of Chippeway, in the State of Michigan, to wit:

"A piece of land, being part of the Chandler-Dunbar Water Power property, otherwise the land patented to William Chandler by the United States by a patent dated December fifteenth, eighteen hundred and eighty-three, bounded as follows: Beginning at a point on the east boundary of the said property distant northerly four hundred (400) feet from the southeast corner of the said property; thence continuing northerly along said east boundary three hundred (300) feet; thence westerly at a right angle to the said east boundary two hundred (200) feet; thence southerly parallel to the said east boundary three hundred (300) feet; thence easterly two hundred (200) feet to the place of beginning."

To have and to hold the above described land unto the lessee, its successors and assigns, for and during the term of eighty (80) years, commencing on the first day of November, A. D. eighteen hundred and ninety-one, and terminating on the first day of November, nineteen hundred and seventy-one, unless an end shall be put to the leasehold before that time under the terms of the indenture of January nineteenth, eighteen hundred and ninety-two.

The Edison Sault Electric Company hereby accepts the piece of land hereby demised and leased as a substitute in full for the piece of land demised and leased under the indenture of January nineteenth, eighteen hundred and ninety-two, and releases and quitclaims to the Chandler-Dunbar Water Power Company the said previously leased piece of land.

The lessor and lessee hereby mutually confirm the said indenture and lease made on the nineteenth day of January, eighteen hundred and ninety-two, in all respects and conditions save and except as to the substitution of land herein provided for.

It witness whereof * * *

32 (Endorsed:) No. 638. Circuit Court of the United States for the Western District of Michigan, Northern Division. In re condemnation of all lands north of St. Marys Falls Ship Canal to international boundary. Original. Answer of the Chandler-Dunbar Water Power Company et al., respondents. Filed June 4, 1910. Chas. L. Fitch, clerk, by F. M. Moore, deputy. A. B. Eldredge, attorney for said respondents. Moses Hooper, John H. Goff, of counsel.

33 *Order to include additional parties and adjourning hearing on motion to sustain petition to Sept. 20 at Grand Rapids.*

34 UNITED STATES OF AMERICA.

The Circuit Court of the United States for the 6th Circuit, Western District of Michigan, Northern Division.

No. 638.

In the matter of the condemnation of lands and property of every kind and description north of the present St. Marys Falls Ship Canal, etc.

In this cause the motion of the United States for an order sustaining the petition herein and so forth came on to be heard, and it appearing, upon the suggestion of counsel for the United States and the Chandler-Dunbar Water Power Company that the Michigan Lake Superior Power Company, a corporation created and existing under the laws of Michigan, the secretary whereof is T. Gibson, residing at Toronto, Ontario; Charles D. Warren, residing at Toronto, Ontario; and Clarence M. Brown, residing at Philadelphia, Pa., as receivers of the Michigan Lake Superior Power Company, corporation aforesaid; the Real Estate Trust Company, a corporation of Pennsylvania, and having its principal office in the city of Philadelphia, names of officers unknown; and the United States Mortgage and Trust Company, a corporation created and existing under the laws of the State of New York, having its principal office at the city of New York, names of officers unknown; have, or claim to have, some right, title, or interest as owners, licensees, purchasers, or incumbrances or otherwise in and to certain of the property and riparian rights described in said petition and sought to be condemned and acquired in fee simple by the United States, and they not having been summoned or notified, and it satisfactorily
35 appearing to the court that they should be made parties, it is therefore ordered that they and each of them be made parties to this proceeding, and that the petition may be amended for the purpose of including them and describing so far as known the respective interest they claim to own or have in said property.

It is further ordered that a summons issue to each of them respectively, and that service thereof be made on each of the said parties by some suitable and discreet person, and that proof of such service be made by affidavit and filed herein, they each being nonresidents of this district, or the officers of said corporations being nonresidents of this district so far as known.

It is further ordered that further consideration of the motion aforesaid be postponed until the 20th day of September, A. D. 1910,

in the court room of the court at the city of Grand Rapids at 2 o'clock p. m.

ARTHUR C. DENISON,
U. S. District Judge.

Dated Sept. 12, 1910.
Approved for entry.

(Endorsed:) No. 638. In the Circuit Court of the United States for the Western Dist. of Mich., Northern Div. In re condemnation of lands & property of every kind & description north of present St. Marys Falls Ship Canal, etc. Order for including additional parties and for summons to issue. Filed Sept. 12, 1910. Chas. L. Fitch, clerk. Geo. G. Covell, U. S. atty. W. K. Clute, asst. U. S. atty.

36 *Amendments to petition.*

37 UNITED STATES OF AMERICA.

In the Circuit Court of the United States for the Western District of Michigan, Northern Division.

No. 638.

In the matter of condemnation of lands and property of every kind and description north of present St. Marys Falls Ship Canal, etc.

AMENDMENTS TO PETITION, PURSUANT TO ORDER OF THE COURT.

I.

Petitioner further shows unto the court that the Michigan Lake Superior Power Company, a corporation created and existing under the laws of Michigan, has or claims to have certain right, title, and interest in and to certain of the property described in said petition, which claim thereof is described as follows:

The said Michigan Lake Superior Power Company has constructed and is the owner of a certain canal beginning above the rapids of the St. Marys River and having its outlet into said river a short distance below said rapids, which canal was constructed and intended to be, and is, used for the purpose of diverting water from the St. Marys River, through the same, to the said river below, and utilizing the water thus diverted, while flowing through the same, to develop water power which exists by reason of the difference in the level of the water at the head, or intake, of said canal, and at the foot, or outlet of the same, which difference in level at the present time produces a total fall available for power purposes of about twenty feet; that said canal is of such width and depth as will carry, at the velocity of flow intended to be developed therein, about 32,000 cubic feet of water per second; that said Michigan Lake Superior Power

Company has, and is the owner of, the right and is entitled to divert and flow through its said canal at all times the maximum quantity and volume of water which will flow through the same, and
38 which but for such diversion would flow from the head of said canal to the foot thereof, through the St. Marys River, and on the American side thereof, which right exists as against all and every of the riparian proprietors of lands along the American shore of the said river, between the head, or intake, of said canal, and the foot, or outlet thereof, and particularly the Chandler-Dunbar Water Power Company, and also all other persons, subject only to the paramount right of navigation; that such right of diversion and flow as against said the Chandler-Dunbar Water Power Company arose, and now exists, by virtue of the acts and conduct, both active and passive, of the persons who are now the officers and stockholders of said the Chandler-Dunbar Water Power Company, and the said company, in and about the promotion of the construction and the construction and development of said canal, including the obtaining of the right of way and the necessary permission and authority therefor. For fuller information as to certain of said acts, matters, and things, reference is made to the answer, as amended, of the Michigan Lake Superior Power Company to the bill of complaint of the Chandler-Dunbar Water Power Company, filed in the Circuit Court for the county of Chippewa, in chancery.

That Charles D. Warren, of Toronto, Ontario, and Clarence M. Brown, of Philadelphia, are the receivers of the said corporation and have possession of all its assets, rights, titles, and interests in and to all its property, business, and affairs.

That the Real Estate Trust Company, a corporation created and existing under the laws of Pennsylvania, has or claims to have certain rights, titles, and interests as purchasers, or incumbrancers, or otherwise, in and to certain of the property described in said petition, and particularly to Island No. 5; but just what the full extent of such claim is is unknown to petitioner, and it is therefore asked that said company disclose by its answer the full extent of its claim.

That the United States Mortgage and Trust Company, a corporation created and existing under the laws of New York, has or claims
39 to have certain rights, titles, and interests as purchasers or incumbrancers or otherwise in and to certain of the property described in said petition and this amendment; but just what the full extent of such claim is is unknown to petitioner, and it is therefore asked that said company disclose by its answer the full extent of its claim.

THE UNITED STATES OF AMERICA,
By GEO. G. COVELL,
U. S. Atty., &
WM. K. CLUTE,
Asst. U. S. Attorney, for Petitioner.

WESTERN DISTRICT OF MICHIGAN,
Southern Division, ss:

WM. K. CLUTE, being duly sworn, deposes and says, that he is one of petitioner's attorneys and knows the contents of said petition and the foregoing amendments thereto and makes this affidavit in its behalf. That the facts therein set forth are true, according to the best of his knowledge, information, and belief.

WM. K. CLUTE.

Subscribed and sworn to before me this 13 day of Sept., 1910.
[SEAL.] CHAS. J. POTTER,
Clerk U. S. District Court West Dist. Mich.

(Endorsed:) No. 638. In the Circuit Court of the United States for the Western District of Michigan, Northern Div. In re condemnation of lands & property of every kind & description north of present St. Marys Falls Ship Canal, etc. Amendments to petition. Filed Sept. 13, 1910. Chas. L. Fitch, clerk. Geo. G. Covell, U. S. atty. W. K. Clute, asst. U. S. atty.

40 *Motion to sustain the petition.*

41 UNITED STATES OF AMERICA.

In the Circuit Court of the United States for the 6th Circuit Western District of Michigan, Northern Division.

No. 638.

In the matter of the condemnation of lands and property of every kind and description north of the present St. Mary's Falls Ship Canal, etc.

WESTERN DISTRICT OF MICHIGAN, *ss:*

ELLA M. BACKUS, clerk to U. S. attorney, being duly sworn, deposes and says, that on 25th of August, 1910, she served a notice of which annexed is a copy, a copy of annexed motion and copy of annexed affidavit, upon the respective attorneys named below, by sealing same in a U. S. attorney's franked envelope requiring no postage and depositing same in U. S. post office at Grand Rapids, Michigan, on said day, the respective packets being addressed, when so deposited, as follows:

Stevenson, Carpenter & Butzel, attorneys, Ford Building, Detroit, Mich.; A. B. Eldredge, attorney, Marquette, Mich.; Sherman T. Handy, attorney, Sault Ste. Marie, Mich.; Arthur Webster, attorney, 416 Moffat Bldg., Detroit, Mich.

The said addresses being the respective business addresses of said attorneys.

(Sd.) ELLA M. BACKUS.

Subscribed and sworn to before me this 25th day of August, 1910.
[SEAL.] (Sd.) LEOLYN O. TENHOPEN,
Dep. Clerk, U. S. Dist. Court, West. Dist. Michigan.

42 UNITED STATES OF AMERICA.

The Circuit Court of the United States for the 6th Circuit, Western District of Michigan, Northern Division.

No. 638.

In the matter of the condemnation of lands and property of every kind and description north of the present St. Marys Falls Ship Canal, etc.

To STEVENSON, CARPENTER & BUTZEL,
Attorneys for St. Marys Power Company.
A. B. ELDREDGE,
Attorney for Chandler-Dunbar Water Power Company,
Edison Sault Electric Company,
Sault Ste. Marie Bridge Company,
William Chandler, and
Harris T. Dunbar.
SHERMAN T. HANDY,
Attorney for City of Sault Ste. Marie.
ARTHUR WEBSTER,
Attorney for Standard Trust Company.

GENTLEMEN: Please take notice that a motion, a copy of which is annexed hereto, has been filed herein, and will be brought on for hearing before the said court, at the chambers of Hon. Arthur C. Denison, judge of this district, at the city of Grand Rapids, on the day of August, A. D. 1910, at 2 o'clock p. m., or as soon thereafter as counsel can be heard.

You are also served with a copy of an affidavit of Wm. K. Clute filed herein, stating the appearance and procedure thus far had in the matter.

Dated Aug. , 1910.

Yours, etc.,

_____ _____,
U. S. Attorney, and
_____ _____,
Assistant U. S. Atty, for Petitioner.

43 UNITED STATES OF AMERICA.

In the Circuit Court of the United States for the 6th Circuit Western District of Michigan, Northern Division.

No. 638.

In the matter of the condemnation of lands and property of every kind and description north of the present St. Marys Falls Ship Canal, etc.

Now comes George G. Covell, United States attorney, and Wm. K. Clute, assistant U. S. attorney, for petitioner, the United States,

and moves the court for an order sustaining the said petition, and for an order directing such further procedure as to the method of determining the respective interests of the parties named in the petition and the value of the properties sought to be acquired as therein described as shall be in accordance with law, and the statutes providing for the acquisition of this property by the United States.

This motion is based on the files and records in the case.

Dated Aug. 25, 1910.

(Sd.) GEO. G. COVELL,
U. S. Attorney,

(Sd.) WM. K. CLUTE,
Asst U. S. Attorney, for Petitioner.

44 UNITED STATES OF AMERICA.

The Circuit Court of the United States for the 6th Circuit, Western District of Michigan, Northern Division.

No. 638.

In the matter of the condemnation of lands and property of every kind and description north of the present St. Marys Falls Ship Canal, etc.

WESTERN DISTRICT OF MICHIGAN,
Southern Division, ss:

WILLIAM K. CLUTE, assistant U. S. attorney for said district and one of petitioner's attorneys, being duly sworn, deposes and says that he has knowledge of the facts stated in the matter.

Deponent further says that appearances have been filed and received by the petitioner's attorneys for all the parties named as defendants and owners of properties described in the petition, as follows:

1. The St. Marys Power Company appears by Stevenson, Carpenter and Butzel, as its attorneys, and waive a service of copy of petition. A copy thereof was furnished said firm before they appeared, which copy they have. No answer is filed by it.

2. The city of Sault Ste. Marie appears by Sherman Y. Handy, its attorney, and a copy of the petition was served upon him by mail on May 1st, 1910. No answer is filed by it.

3. The Sault Ste. Marie Bridge Company appears by A. B.
45 Eldridge, its attorney, and a copy of the petition was served upon him by mail on May 19th, 1910. No answer is filed by it.

The property sought to be acquired which it owns is declared in the second description, and fourth description, part "b."

With reference to the procedure thus far had to acquire the property of the Sault Ste. Marie Bridge Company deponent says

that the United States attorney's office is in receipt of correspondence from the U. S. Engineer office, War Department, as follows:

WAR DEPARTMENT,
UNITED STATES ENGINEER OFFICE,
Detroit, Michigan, Jones Building, May 23, 1910.

Mr. GEO. G. COVELL,
U. S. Attorney, Grand Rapids, Mich.

SIR: Referring again to the matter of condemnation of land required for the new lock and canal at Sault Ste. Marie, Mich., I have to inform you that the Secretary of War, on May 17, 1910, authorized the acceptance of the proposition of Mr. A. B. Eldridge, submitted in letter dated April 13, 1910, on behalf of the Sault Ste. Marie Bridge Company. A copy of the papers in the matter is enclosed herewith for your information. I have to request that further action against the bridge company be dropped.

Very respectfully,

CHAS. D. TOWNSEND,
Colonel, Corps of Engineers.

1 inclosure.

SAULT STE. MARIE, MICH.,
April 13, 1910.

Col. C. McD. TOWNSEND, *City.*

DEAR SIR: Having in mind the negotiations between the Sault Ste. Marie Bridge Company and the Chief of Engineers, at which you were present, and your letter to me advising me that you were authorized on behalf of the War Department to negotiate a contract with that company looking to an amicable adjustment of the differences between them, on behalf of the bridge company I propose as follows:

The bridge company will convey to the United States all its property of every kind and nature lying between the international boundary line at Sault Ste. Marie, Mich., and the present
46 United States ship canal, except its bridge structure and its right to maintain the same under the act of Congress authorizing the construction of the bridge.

The United States shall pay the bridge company $12,615.00, being the amount which the bridge company paid in condemnation to obtain the property conveyed.

The bridge company shall build a Bascule bridge directly over the propesed new canal, the clear space to be at least 318 feet; the plans for the said bridge to be approved by the War Department.

The United States shall fill the existing span in the bridge company's bridge next northerly of the said Bascule bridge from the water to the level of the ties on the said span. The bridge company shall be allowed to remove said existing span.

The United States shall be allowed to construct an approach to the said fill from the level of the banks of its canal, with an opening

through the north end of said fill for side tracks. When the said approach and the road bed for the side tracks have been prepared, the bridge company will place thereon the necessary ties and rail, properly ballasted, not exceeding three-quarters of a mile in all, and will operate the same, when desired by the United States, at reasonable rates for the services rendered.

The plans for the opening in the fill shall be approved by the said bridge company.

Yours, very respectively,

A. B. ELDREDGE,
Attorney for the Ste. St. Marie Bridge Company.

[1st indorsement.]

WAR DEPARTMENT, U. S. ENGINEER OFFICE,
Detroit, Mich., April 15, 1910.

1. Respectfully submitted to the Chief of Engineers, U. S. A.

2. The within prposition is practically the agreement reached at the meeting in the Office of the Chief of Engineers, with the exception of an additional paragraph providing for the construction of an approach to the bridge fill, and an opening through the fill, for side tracks; and for the operation of same, when desired by the United States, at reasonable rate by the bridge company.

3. The entire proposition is considered very reasonable and fair, and its acceptance is recommended as in the interest of the United States.

C. McD. TOWNSEND,
Colonel, Corps of Engineers.

[2nd indorsement.]

WAR DEPARTMENT,
OFFICE OF THE CHIEF OF ENGINEERS,
Washington, April 21, 1910.

47 1. Respectfully submitted to the Secretary of War.

2. Under date of February 10, 1910, the Secretary of War authorized Colonel Townsend to enter into negotiations with the Sault Ste. Marie Bridge Company for the purchase of the property of that company, which is needed by the United States in connection with the improvement of St. Marys River at the Falls, as provided in section 11 of the river and harbor act of March 3, 1909. Decision had previously been reached by the department that the company's bridge structure and its franchise to maintain the same were not necessary for the purposes of the Government, and consequently were not to be acquired.

3. The authorized negotiations have been in progress, and the company submits a proposition, set forth within, for consideration and acceptance by the department. Colonel Townsend regards the proposition as very fair and reasonable, and recommends its acceptance as being in the interest of the United States. I have given it

very careful study, and fully concur in his views and recommendation.

4. Acceptance of the proposition and the consummation of its details will accord with the desire of Congress and obviate the necessity for condemnation proceedings, so far as the company's property is concerned.

5. It is understood from the instructions of the Secretary of War of August 19, last, that he desires all these matters brought to his personal attention before action.

W. L. MARSHALL,
Chief of Engineers, U. S. Army.

8020/1567.

[4th indorsement.]

WAR DEPARTMENT, *April 27, 1910.*

Respectfully returned to the Chief of Engineers, with request for information as to the estimated cost, separately, for the two fills as herein proposed, and as to what appropriation is available for paying for the same.

By order of the Secretary of War.

JOHN C. SCHOFIELD,
Asst. and Chief Clerk.

[5th indorsement.]

WAR DEPARTMENT,
OFFICE OF THE CHIEF OF ENGINEERS,
Washington, April 30, 1910.

Respectfully returned to Colonel Townsend, who will please submit the estimates called for. It is presumed that the part of the approach lying upon the present right of way of the bridge company is the second fill referred to.

By command of the chief of Engineers:

J. B. CAVANAUGH,
Major, Corps of Engineers.

8020/1567.
Incl. 1571 accompg.

48

[6th indorsement.]

WAR DEPARTMENT,
U. S. ENGINEER OFFICE,
Detroit, Mich., May 10, 1910.

1. Respectfully returned to the Chief of Engineers, U. S. A.

2. The work proposed is to fill under the first bridge span north of the new canal, including so much of an approach thereto as lies within the bridge company's right-of-way, and to construct a culvert under this span, for side tracks, which will require an abutment to retain the north end of the fill. A blue print sketch showing this work is inclosed.

3. The fill in the vicinity of the bridge will require about 6,000 cubic yards of material, and if done independently would cost about

50¢ per yard. As, however, it is proposed to do this work in connection with the construction of the new canal which will require the excavation of about a million cubic yards, it is believed that this fill as well as that along the new side track will be without expense to the United Etates.

4. The abutament is subject to the approval of the bridge company, so that its dimensions can not be definitely fixed, but it is estimated that its cost will be approximately $3,500 to $4,000, the work including construction of cofferdam, some excavation, the necessary pumping, and the building of the concrete work.

5. Payment will be made from the appropriation for improving St. Marys River, Michigan, incidental to the construction of the new lock and canal.

C. McD. Townsend,
Colonel, Corps of Engineers.

2 inclosures: 8020/1571 and 1 addtl.

[7th indorsement.]

War Department,
Office of the Chief of Engineers,
Washington, May 14, 1910.

1. Respectfully returned to the Secretary of War, inviting attention to the statement of Colonel Townsend in 6th indorsement giving the information called for in 4th indorsement.

2. The act of March 2, 1907, appropriates $1,200,000 for the new lock at St. Marys Falls, and authorizes contracts to the aggregate extent of $5,000,000, this appropriation being applicable to the acquisition of all the private property needed, as well as to all work incidental to the improvement.

W. L. Marshall,
Chief of Engineers, U. S. Army.

8020/1567
Incls. 1571 2 1572 accompg.

49 [8th indorsement.]

War Department, *May 17, 1910.*

Approved as recommended by the Chief of Engineers in the second indorsement hereon.

J. M. Dickinson,
Secretary of War.

[9th indorsement.]

War Department,
Office of the Chief of Engineers,
Washington, May 20, 1910.

1. Respectfully returned to Colonel Townsend, inviting attention to the action of the Secretary of War as shown by 2nd and 8th indorsements hereon.

2. Colonel Townsend will inform the United States district attorney of this action, and with his advice and assistance, where necessary, take such steps as may be appropriate to consummate the proposition agreed to.

By command of the Chief of Engineers:

J. B. CAVANAUGH,
Major, Corps of Engineers.

8020/1567.
Inclo. 1572 accompg.

[10th indorsement.]

WAR DEPARTMENT,
UNITED STATES ENGINEER OFFICE,
Detroit, Mich., May 23, 1910.

Respectfully returned to the Chief of Engineers, U. S. A., the necessary record having been made.

C. McD. TOWNSEND,
Colonel, Corps of Engineers.

Inclo. 1572 accompg.

Deponent, therefore, suggests that further proceedings as to the property of the Sault Ste. Marie Bridge Company be suspended.

4. Deponent further says that the Chandler-Dunbar Water Power Company, the Edison-Sault Electric Company, William Chandler and Harris T. Dunbar, respectively, appear by A. B. Eldredge, 50 their attorney, and J. H. Goff and Moses Hooper of counsel, and each have filed answers, and a copy of the petition was served upon Mr. Eldredge by mail May 19th, 1910.

5. The Standard Trust Company appears by Arthur Webster as its attorney, and a copy of the petition was served upon him by mail on August 20th, 1910. No answer has been filed by it.

And further deponent says not.

(Sd.) WM. K. CLUTE.

Subscribed and sworn to before me this 25th day of August, 1910.
[SEAL.] (Sd.) CHAS. J. POTTER,
Clerk, U. S. District Court, Western Dist. of Mich.

(Endorsed:) No. 638. In the Circuit Court of the United States for the Western Dist. of Mich., Northern Div. In re matter of condemnation of lands & property of every kind & description north of present St. Marys Falls Ship Canal, etc. Motion, notice, & affidavit as to sustaining petition. Filed Aug. 25, 1910. Chas. L. Fitch, clerk. George G. Covell, U. S. atty., and W. K. Clute, asst. U. S. atty.

51 In the Circuit Court of the United States for the Western District of Michigan, Northern Division.

TUESDAY, SEPTEMBER 20TH, 1910.

The court met pursuant to adjournment.
Present the honorable Arthur C. Denison, U. S. district judge.

No. 638.

In the matter of the condemnation of all lands and property north of St. Marys Ship Canal, etc.

In this cause, on hearing the motion for an order sustaining the petition and so forth, now pending herein, is adjourned until October 8th, 1910, at 2 o'clock p. m., at the U. S. court rooms at the city of Marquette.

52 *Answer of city of Sault Ste. Marie.*

53 THE UNITED STATES OF AMERICA.

The Circuit Court of the United States for the Sixth Circuit, Western District of Michigan, Northern Division.

In the matter of the condemnation of all lands and property of every kind and description north of the present Saint Marys Falls Ship Canal throughout its entire length and lying between said ship canal and the international boundary line at Sault Ste. Marie, in the State of Michigan.

UNITED STATES OF AMERICA, PETITIONER,
vs.
CITY OF SAULT STE. MARIE, IMPLEADED WITH OTHERS, respondent.

Now comes the respondent, the city of Sault Ste. Marie, a municipal corporation created and existing under the laws of the State of Michigan, and answers the petition of the United States in the above entitled matter and for such answer alleges that—

1.

All the allegations in section one of said petition are true as it is informed and believes.

54 2.

Respondent admits that Congress did enact, as stated in paragraph two of the said petition.

3.

Respondent admits that certain parts of the lands, described in paragraph three of said petition, are necessary for public use for

the purpose therein stated, but neither admits nor denies that all the lands therein described are necessary for such purposes.

4.

This respondent has no interest in the lands described in the 1st, 2nd, 4th, and 5th descriptions in paragraph four of said petition, but alleges that it is the owner in fee simple of the lands described in the 3rd description thereof.

5.

The statement in paragraph five of the petition is true, as this respondent is informed and believes.

6.

The statement in paragraph six of the petition is true, as this respondent is informed and believes.

7.

The statement in paragraph seven of the petition is true, as this respondent is informed and believes.

8.

Respondent has no knowledge of the allegations contained in paragraph 8 of the said petition, and therefore neither admits nor denies them.

55 9.

Wherefore, this respondent prays judgment herein against the United States for the amount of the just compensation for its property sought to be condemned, and interest thereon from the time of the filing of the petition for taking herein.

CITY OF SAULT STE. MARIE,
By SHERMAN T. HANDY,
Its Attorney.

(Endorsed:) 638. Circuit Court of the United States for the Western District of Michigan, Northern Division. In re condemnation of all lands north of St. Marys Falls Ship Canal to international boundary. Answer of the city of Sault Ste. Marie, respondent. Filed Sept. 30, 1910. Chas. L. Fitch, clerk, by F. M. Moore, deputy. Sherman T. Handy, attorney for said respondent.

56 *Answer of United States Mortgage & Trust Company.*

57 UNITED STATES OF AMERICA.

The Circuit Court of the United States for the Western District of Michigan, Northern Division.

No. 635.

In the matter of the petition for condemnation of all lands north of St. Marys Ship Canal to international boundary, etc.

The answer of the United States Mortgage & Trust Company, one of the respondents in the above-entitled matter, to the petition filed therein.

This respondent, for answer to said petition, as amended, says as follows:

I.

That on or about the 1st day of January, 1903, the Michigan Lake Superior Power Company, a corporation duly organized under the laws of the State of Michigan (hereinafter called the Michigan Company), for the purpose of funding its indebtedness and to provide for making additions and extensions in the conduct of its business and property, and for the purchase of additional property, resolved to issue its five per cent (5%) thirty (30) year gold bonds, amounting in the aggregate, par value of principal to the sum of two million four hundred thousand dollars ($2,400,000) in the denomination of one thousand dollars ($1,000) each, interest on said bonds to be paid semiannually on the 1st days of January and July, and to secure the payment of said bonds by the execution and delivery of a mortgage or deed of trust upon the property rights and franchises then owned by the Michigan Company and
58 described and set forth in the mortgage hereinafter mentioned, and upon the property which the Michigan Company might thereafter acquire.

II.

That in pursuance of said resolution and determination and in the exercise of its lawful corporate powers, the Michigan Company did thereafter and on or about January 1, 1903, make and execute its said bonds, amounting in the aggregate to two million four hundred thousand dollars, par value of principal, by each of which bonds the Michigan Company promised to pay to the bearer or, if registered, to the registered holder thereof, the principal amount thereof in gold coin of the United States of America of or equal to the then standard of weight and fineness, on the 1st day of January,

1933, at the office or agency of the Michigan Company in the city of New York, and to pay interest thereon from the 1st day of January, 1903, at the rate of five per cent (5%) per annum in like gold coin, semiannually, on the 1st days of January and July in each year, at its said office or agency.

III.

That on or about the 1st day of January, 1903, pursuant to the resolution and determination above mentioned, and in the due exercise of its corporate powers, in order to secure the payment of all said bonds at any time issued and outstanding, and of the interest thereon, the Michigan Company executed and delivered to the Central Trust Company of New York, a corporation organized under the laws of the State of New York, its certain mortgage or
59 deed of trust bearing date January 1, 1903, and thereby mortgaged to said Central Trust Company, its successors in the trust, and its and their assigns, forever, upon the trusts therein mentioned, all of the property set forth and described therein. Said mortgage was executed for the purpose of securing the payment of all of said bonds and the interest thereon as aforesaid. It was recorded on the 12th day of March, 1903, in the register's office of the county of Chippewa, State of Michigan, in liber 30 of mortgages on pages 140–208, inclusive. Said Central Trust Company of New York accepted the trust created in and by said mortgage before the recording of the same. This respondent hereby refers to the record of said mortgage for a true statement of the terms and provisions thereof, the property described therein, and the bonds issued thereunder.

IV.

That of the bonds secured by said mortgage, the entire amount thereof, to wit, two million four hundred thousand ($2,400,000), par value of principal, were made and executed as aforesaid, and were duly authenticated by the endorsement thereon of the certificate of said Central Trust Company of New York, as trustee, as provided in and by said bonds and mortgage, and as so authenticated were duly issued and delivered by said Central Trust Company of New York in the manner provided in and by said mortgage or deed of trust; and this respondent is informed and believes that said bonds so issued and delivered, and all of them, have been duly issued, negotiated, and sold to divers persons who have hereby
60 become bona fide holders thereof as purchasers of the same for value, and that all of said bonds are now outstanding and valid, binding and subsisting obligations of the Michigan Company and secured by said mortgage.

V.

That said Central Trust Company of New York continued to act as trustee under said mortgage until about the month of August,

1904, when it resigned as such trustee and this respondent, United States Mortgage and Trust Company, was duly appointed successor trustee under said mortgage, and since then has been and now is acting as such trustee.

VI.

That the Michigan Company made default on the 1st day of July, 1903, in the payment of the installment of interest due on that day upon all of said bonds issued and outstanding and secured by said mortgage; and that it has also made default in the payment of each semiannual installment of interest since July 1, 1903, and this respondent says that there is now due on said bonds the entire principal sum thereof, namely, two million four hundred thousand dollars ($2,400,000), and interest thereon at the rate of five per cent. (5%) per annum since January 1, 1903, and interest at the like rate on the several installments of interest from the time when they became due according to the terms of said bonds, and that all of said principal and interest is secured by said mortgage.

VII.

61 That some or all of the lands described in the petition in this matter are also described and included in said mortgage, and the respondent has a lien thereon to secure the payment of the amount due for the principal and interest on said bonds above mentioned.

VIII.

As to all matters set forth in said petition not hereinbefore answered, this respondent says that it has not sufficient knowledge or information to make answer thereto, and it leaves the petitioner to make its proof thereof.

UNITED STATES MORTGAGE & TRUST COMPANY.
By KLEINHANS & KNAPPEN, *Its Attorneys.*
KLEINHANS & KNAPPEN,
Attorneys for Respondent,
United States Mortgage & Trust Company.

WESTERN DISTRICT OF MICHIGAN,
Kent County, ss:

Jacob Kleinhans, being duly sworn, deposes and says that he is one of the attorneys for United States Mortgage & Trust Company, the respondent above mentioned; that he has read the foregoing answer and knows the contents thereof, and that the same is true according to the best of his knowledge, information and belief.

JACOB KLEINHANS.

Subscribed and sworn to before me, this 1st day of October, 1910.
[SEAL.] DORA B. PARKER,
Notary Public, Kent Co., Mich.
My commission expires Feb. 15, 1914.

62 (Endorsed:) No. 638. U. S. Circuit Court West. Dist. Mich., N. Div. In the matter of the petition for the condemnation of all lands north of St. Marys Ship Canal to international boundary, etc. Answer of United States Mortgage & Trust Company. Filed Oct. 3, 1910. Chas. L. Fitch, clerk, by F. M. Moore, deputy. Kleinhans & Knappen, attys. for respondents, United States Mortgage & Trust Company.

63 The Circuit Court of the United States for the Western District of Michigan, Northern Division.

WEDNESDAY, OCTOBER 12, 1912.

The court met pursuant to adjournment.
Present the honorable Arthur C. Denison, district judge.

No. 638.

In the matter of the petition for condemnation of all lands north of St. Marys Falls Ship Canal, etc.

In this matter, the motion for an order sustaining the petition, and so forth, came on to be heard on Saturday, October 8th, 1910, at 2 o'clock p. m., at the United States court room at Marquette, and for reasons sufficient to the court the hearing of said motion is as of the 8th day of October instant adjourned to the 18th day of October, A. D. 1910, at 10 o'clock a. m., at the United States court room in the city of Grand Rapids.

Dated October 8th, 1910.

Approved for entry:

ARTHUR C. DENISON,
U. S. District Judge.

(Endorsed:) No. 638. United States Circuit Court, Western District of Michigan, Northern Div. In the matter of petition for condemnation of all lands north of St. Marys Falls Ship Canal, etc. Order continuing hearing on motion to Oct. 18. Filed Oct. 12, 1910. Chas. L. Fitch, clerk.

64 In the Circuit Court of the United States for the Western District of Michigan, Northern Division.

In equity.

TUESDAY, OCTOBER 18, 1912.

The court met pursuant to adjournment.
Present the honorable Arthur C. Denison, U. S. district judge.

No. 638.

In the matter of the petition for condemnation of all lands north of St. Marys Falls Ship Canal, etc.

In this matter the motion for an order sustaining the petition, and so forth, having been heretofore adjourned by an order of the court

to the 18th day of October instant, for reasons sufficient to the court, the hearing of said motion is further adjourned to the 24th day of October, A. D. 1910, at ten o'clock a. m., at the United States court rooms in the city of Grand Rapids.

65 *Order sustaining petition and proceedings.—Order for trial before court without a jury.—Order setting trial for Dec. 6th, 1910.*

66 In the Circuit Court of the United States for the Western District of Michigan, Northern Division.

MONDAY, OCTOBER 24, 1910.

The court met pursuant to adjournment.
Present, the honorable Arthur C. Denison, U. S. district judge.

In the matter of the condemnation of certain described lands lying between St. Marys Falls Ship Canal and the international boundary line.

In the above-entitled matter, the petition of the United States seeking the condemnation of said lands pursuant to the provisions of § 11 of the act of March 3rd, 1909 (being chapter 264 of volume 35 United States Statutes at Large), having been filed, and all the defendants named therein having entered their several and respective appearances, and the court having thereafter allowed an amendment to the petition, whereby certain additional parties were named defendants, and all such additional defendants having duly entered their several appearances, and the attorney for the United States having moved for an order sustaining the said petition and directing further proceedings therein, and such motion having been duly brought on to be heard after notice to each one of the defendants, and the hearing thereof having been continued until this date:

And it further appearing that each one of the parties hereto has filed, in writing, and signed by its attorney, a waiver or jury trial and an agreement that all matters of law or fact which may arise in this proceeding may be heard and determined by the court without a jury;

67 And no person appearing and interposing any objection to the petition or proceeding;

It is thereupon ordered by the court as follows:

1. That the petition, as amended, and the proceedings had herein, appear to be, and are, in due form and are sustained.

2. That so far as now appears and so far as the court can ascertain, all persons interested in the premises sought to be condemned or claiming so to be interested, have appeared herein and are now represented in this proceeding by the respective attorneys who have entered such appearances.

3. That the subject matter hereof stand for hearing before the court, without a jury, in conformity, as near as may be, to chapter 46 of the Michigan Compiled Laws of 1897, and the stipulation and agreement of the parties waiving a jury and submitting to the court all matters of fact and of law, viz, evidence shall be produced, by the parties, before the court as in a trial at law before the court without a jury; the evidence so taken shall be taken down by a stenographer, and, promptly thereafter, transcribed and filed with the clerk of the court; the court shall make a finding of facts showing the separate interest of each person owning or interested in any part of the premises, and the description of each separate interest in such parcel, and all the necessary facts to show the truth and the right of the matter; the court shall thereupon hear the parties and their objections, if any, to such finding of facts, and shall thereupon enter such judgment of condemnation, or otherwise, as the right of the matter may require.

4. The time for the production of evidence is hereby fixed
68 for Tuesday, December 6th, 1910, at the city of Grand Rapids in the said district, at which time and place and on the succeeding days until such taking of evidence is complete, the United States shall produce its evidence in support of such petition and upon the subject of the value of the property sought to be taken, the defendants their evidence thereupon, and the United States its evidence in reply.

Approved for entry October 24th, 1910.

ARTHUR C. DENISON, *District Judge.*

(Endorsed:) In the Circuit Court of the United States for the Western District of Michigan, Northern Division. In the matter of the condemnation of certain described lands lying between St. Marys Falls Ship Canal and the international boundary line. Order. Filed Oct. 24, 1910. Chas. L. Fitch, clerk.

69 *Stipulation of all parties waiving jury trial, also appearances of all parties defendants.*

70 The Circuit Court of the United States for the 6th Circuit, Western District of Michigan, Northern Division.

No. 638.

In the matter of the petition for condemnation of all lands north of St. Marys Ship Canal to international boundary, etc.

A jury trial of any issue involved in this proceeding is hereby waived, and it is agreed that all matters of law or fact which may arise in this proceeding may be heard and determined by the court without a jury.

(Sd.) GEORGE G. COVELL,
U. S. Attorney.
WILLIAM K. CLUTE,
Asst. U. S. Attorney, for the United States.

71 The Circuit Court of the United States for the 6th Circuit, Western District of Michigan, Northern Division.

No. 638.

In the matter of the petition for condemnation of all lands north of St. Marys Ship Canal to international boundary, etc.

A jury trial of any issue involved in this proceeding is hereby waived, and it is agreed that all matters of law or fact which may arise in this proceeding may be heard and determined by the court without a jury.

(Sd.) ARTHUR WEBSTER,
Attorney for the Standard Trust Company of New York.

72 The Circuit Court of the United States for the 6th Circuit, Western District of Michigan, Northern Division.

No. 638.

In the matter of the petition for condemnation of all lands north of St. Marys Ship Canal to international boundary, etc.

A jury trial of any issue involved in this proceeding is hereby waived, and it is agreed that all matters of law or fact which may arise in this proceeding may be heard and determined by the court without a jury.

(Sd.) KLEINHANS & KNAPPEN,
Attorneys for the United States Mortgage & Trust Company of New York.

73 The Circuit Court of the United States for the 6th Circuit, Western District of Michigan, Northern Division.

No. 638.

In the matter of the petition for condemnation of all lands north of St. Mary's Ship Canal to international boundary, etc.

A jury trial of any issue involved in this proceeding is hereby waived and it is agreed that all matters of law or fact which may arise in this proceeding may be heard and determined by the court without a jury.

(Sd.) SHERMAN T. HANDY,
Attorney for City of Sault Ste. Marie, Mich.

74 The Circuit Court of the United States for the 6th Circuit, Western District of Michigan, Northern Division.

No. 638.

In the matter of the petition for condemnation of all lands north of St. Mary's Ship Canal to international boundary, etc.

A jury trial of any issue involved in this proceeding is hereby waived and it is agreed that all matters of law or fact which may arise in this proceeding may be heard and determined by the court without a jury.

(Sd.) STEVENSON, CARPENTER & BUTZEL,
Attorneys for St. Marys Power Co.,
CLARENCE M. BROWN and
CHARLES D. WARREN,
As Receivers of Michigan Lake Superior Power Company.

75 The Circuit Court of the United States for the 6th Circuit, Western District of Michigan, Northern Division.

No. 638.

In the matter of the petition for condemnation of all lands north of St. Mary's Ship Canal to international boundary, etc.

A jury trial of any issue involved in this proceeding is hereby waived and it is agreed that all matters of law or fact which may arise in this proceeding may be heard and determined by the court without a jury.

(Sd.) LEO. M. BUTZEL,
Attorney for Michigan Lake Superior Power Company.

76 The Circuit Court of the United States for the 6th Circuit, Western District of Michigan, Northern Division.

No. 638.

In the matter of the petition for condemnation of all lands north of St. Marys Ship Canal to international boundary, etc.

A jury trial of any issue involved in this proceeding is hereby waived, and it is agreed that all matters of law or fact which may arise in this proceeding may be heard and determined by the court without a jury.

(Sd.) A. S. WEILL,
Attorney for the Real Estate Trust Company of Philadelphia, Trustee.

77 (Endorsed:) No. 638. In the Circuit Court of the United States for the Western Dist. of Mich., No. Div. In the matter

of the condemnation of all lands N. of St. Marys Falls Ship Canal to international boundary, &c. Waivers of jury trial. Filed Oct. 24, 1910. Chas. L. Fitch, clerk.

78 *Proof of service of copy of order fixing time of hearing, &c., for December 6th.*

79 In the Circuit Court of the United States for the Western District of Michigan, Northern Division.

No. 638.

In the matter of the condemnation of certain described lands lying between St. Marys Falls Ship Canal and the international boundary line.

WESTERN DISTRICT OF MICHIGAN,
Southern Division, ss:

Wm. K. Clute, asst. U. S. attorney, being duly sworn, deposes and says, that on the 4th day of November, 1910, he served a true copy of an order sustaining the petition and fixing day of trial in this matter, a copy of which is hereto annexed, upon each respective attorney or firm of attorneys representing defendants in this matter, by enclosing same in a U. S. attorney's official business franked envelope requiring no postage, sealing it, and depositing the packet so sealed and addressed as below in the U. S. postoffice at the city of Grand Rapids, Mich., on said day, as follows:

To A. B. Eldredge, Esq., Marquette, Mich.; Sherman T. Handy, Esq., atty., Sault Ste. Marie, Mich.; Messrs. Stevenson, Carpenter & Butzel, attys., Fort Bldg., Detroit, Mich.; A. S. Weill, Esq., atty., 1418 Land Title Bldg., Philadelphia, Pa.; Arthur Webster, Esq., atty., 416 Moffat Bldg., Detroit, Mich.; Messrs. Kleinhans & Knappen, attys., Mich. Trust Bldg., Grand Rapids, Mich.; Leon Butzel, Esq., atty., Ford Bldg., Detroit, Mich.

The said addresses being the respective business address of said attorneys.

(Sd.) WM. K. CLUTE.

Subscribed and sworn to before me this 4th day of Nov., 1910.

[SEAL.] (Sd.) CHAS. J. POTTER,
Clerk U. S. Dist. Court, West. Dist. Mich.

80 In the Circuit Court of the United States for the Western District of Michigan, Northern Division.

No. 638.

In the matter of the condemnation of certain described lands lying between St. Mary's Falls Ship Canal and the international boundary line.

In the above entitled matter, the petition of the United States seeking the condemnation of said lands pursuant to the provisions

of #11 of the act of March 3, 1909 (being chapter 264 of volume 35, United States Statutes at Large), having been filed, and all the defendants named therein having entered their several and respective appearances, and the court thereafter allowed an amendment of the petition, whereby certain additional parties were named defendants, and all such additional defendants having duly entered their several appearances, and the attorney for the United States having moved for an order sustaining the said petition and directing further proceedings therein, and such motion having been duly brought on to be heard after notice to each one of the defendants, and the hearing thereof having been continued until this date;

And it further appearing that each one of the parties hereto has filed, in writing, and signed by its attorney, a waiver of jury trial and an agreement that all matters of law or fact which may arise in this proceeding may be heard and determined by the court without a jury:

And no person appearing and interposing any objection to the petition or proceeding;

81 It is thereupon ordered by the court as follows:

1. That the petition, as amended, and the proceedings had herein, appear to be, and are, in due form and are sustained.

2. That so far as now appears and so far as the court can ascertain, all persons interested in the premises sought to be condemned or claiming so to be interested, have appeared herein and are now represented in this proceeding by the respective attorneys who have entered such appearances.

3. That the subject matter hereof stand for hearing before the court without a jury, in conformity, as near as may be, to chapter 46 of the Michigan Compiled Laws of 1897, and the stipulation and agreement of the parties waiving a jury and submitting to the court all matters of fact and of law, viz, evidence shall be produced by the parties before the court as in a trial at law before the court without a jury; the evidence so taken shall be taken down by a stenographer, and, promptly thereafter, transcribed and filed with the clerk of the court; the court shall make a finding of facts showing the separate interest of each person owning or interested in any part of the premises, and the description of each separate interest in such parcel, and all the necessary facts to show the truth and the right of the matter; the court shall thereupon hear the parties and their objections, if any, to such finding of facts, and shall thereupon enter such judgment of condemnation, or otherwise, as the right of the matter may require.

4. The time for the production of evidence is hereby fixed for Tuesday, December 6th, 1910, at the city of Grand Rapids in said district, at which time and place and on the succeeding days

82 until such taking of evidence is complete, the United States shall produce its evidence in support of such petition and upon the subject of the value of the property sought to be taken,

the defendants their evidence thereupon, and the United States its evidence in reply.

Approved for entry October 24th, 1910.

ARTHUR C. DENISON,
District Judge.

(Endorsed:) No. 638. In the Circuit Court of the United States for the West. Dist. of Mich., Northern Div. In re condemnation of certain lands north of St. Marys Falls Ship Canal. Order sustaining petition and fixing day of trial & proof of service. Filed Nov. 5, 1910. Charles L. Fitch, clerk, by Charles Kelsey, deputy.

83 THE UNITED STATES OF AMERICA.

The Circuit Court of the United States for the Western District of Michigan, Northern Division.

SATURDAY, DECEMBER 3, 1910.

The court met pursuant to adjournment.

Present, the honorable Arthur C. Denison, U. S. dist. judge.

No. 638.

In the matter of the petition to condemn all the lands north of the present St. Marys Falls Ship Canal to the international boundary at Sault Ste. Marie, Michigan.

In the above entitled matter, for good cause shown to the court, it is ordered that the time fixed by the order of October 24th, 1910, for the production of evidence on Tuesday, December 6th, 1910, be changed to January 10th, 1911, and on said day, that is to say, January 10th, 1911, the production of evidence shall commence, at the U. S. court room in the city of Grand Rapids, at 10 o'clock a. m., and in all other respects the procedure shall be in accordance with such order the same as if the time originally fixed had been the 10th of January, 1911.

Approved for entry, December 3rd, 1910.

ARTHUR C. DENISON,
District Judge.

A true copy.

(Endorsed:) No. 638. In the Circuit Court of the United States for the Western District of Michigan, Northern Division. In re petition to condemn all lands north of present St. Marys Falls Ship Canal to international boundary, etc. Order fixing Jan. 10, 1911, as day to commence proofs. Filed Dec. 3, 1910. Chas. L. Fitch, clerk.

84 United States District Court, Western District of Michigan, Northern Division.

SATURDAY, APRIL 6, 1912.

The court met, pursuant to adjournment.
Present, Hon. Arthur C. Denison, circuit judge.

(Former Circuit Court No. 638.)

In the matter of the condemnation of all lands north of the St. Marys Falls Ship Canal to the international boundary.

In the above entitled matter for good cause shown it is ordered that the trial of this cause be postponed until the 21st day of February, 1911, at 10 o'clock in the forenoon, at the United States district court room in Grand Rapids.

This order to be filed and to take effect as of the 10th day of January, 1911, the announcement of the said postponement having been then made, but not having been entered formally on the journal.

Approved for entry April 6, 1912.

(Sd.) ARTHUR C. DENISON,
Circuit Judge, Designated.

(Endorsed:) No. 638. United States District Court, Western District of Michigan, Northern Division. In the matter of the condemnation of all the lands north of the St. Marys Falls Canal to the international boundary. Order adjourning trial to February 21, 1911. Filed Apr. 8, 1912. Chas. L. Fitch, deputy clerk.

85 *Proof of service notice of hearing for Feb. 21, 1911.*

86 United States District Court, Western District of Michigan, Northern Division.

(Former Circuit Court No. 638.)

In the matter of the condemnation of all lands north of the St. Marys Falls Ship Canal to the international boundary.

WESTERN DISTRICT OF MICHIGAN,
Southern Division, ss:

WM. K. CLUTE, one of the counsel for the United States in this proceeding, being duly sworn, deposes and says that on the 3rd of February, 1911, he gave written notice to the attorneys for the respective parties defendants and claimed property owners in this proceeding of the coming on for trial of this cause before the court in the United States court room at the city of Grand Rapids on the

21st of February, 1911, by writing and mailing to each of the said attorneys a letter, the body of which was as follows:

FEB. 3, 1911.

SIR: The Government expects to be in full readiness to proceed with the Soo condemnation case on the 21st of February at 10 o'clock, in the United States court room here in Grand Rapids. I know of no reason to anticipate any further adjournment, and we expect to be prepared to go on with it from time to the conclusion of the testimony, without a break, and the court will not adjourn for the 22nd of Feb.

I am writing you this early, in order that you may make your plans accordingly.

Respectfully,

WM. K. CLUTE,
Special Asst. U. S. Attorney.

87 That the notice was in the form of a letter addressed to each one of said attorneys, that said letters were addressed respectively, stating in the body as above indicated, to J. H. Goff, Detroit, Mich., Union Trust Bldg.; Moses Hooper, Oshkosh, Wis.; Sherman T. Handy, Sault Ste. Marie, Mich.; Messrs. Stevenson, Carpenter & Butzel, Detroit, Mich., Ford Bldg.; Arthur Webster, Detroit, Mich., 416 Moffat Bldg.; A. S. Weill, Phila., Pa., 1418 Title Bldg.; Leon Butzel, Detroit, Mich., Ford Bldg.; Knappen & Kleinhans, Grand Rapids, Mich.; A. B. Eldredge, Marquette Mich., the said addresses being the business addresses of said attorneys, and that the said letters were sealed in U. S. attorneys' sealed franked envelopes and posted in the United States mails on said 3rd of Feb., 1911, at the city of Grand Rapids, Michigan; and further deponent saith not.

(Sd.) WM. K. CLUTE.

Subscribed and sworn to before me this 22nd of March, 1912.

(Sd.) GETA V. GODWIN,
Notary Public, Kent Co., Mich.

My commission expires April 26th, 1915.

(Endorsed:) No. 638. United States District Court, Western District of Michigan, Northern Division. In the matter of the condemnation of all lands north of the St. Marys Falls Canal to the international boundary. Proof of service, notice of trial for Feb. 21, 1911. Filed March 25, 1912. Fred J. Schultheis, dep. clerk.

88 *Requests of U. S. and Chandler Dunbar Water Power Company that court find law and facts.*

UNITED STATES OF AMERICA.

The Circuit Court of the United States for the Western District of Michigan, Northern Division.

No. 638.

In the matter of the petition of the United States for the condemnation of all the lands and property north of the present St. Marys Ship Canal to the international boundary.

The United States, petitioner, respectfully requests the court to make special findings of facts and the conclusions of law in this case.

WM. K. CLUTE,
Special Assistant U. S. Attorney, for Petitioner.

(Endorsed:) No. 638. In the Circuit Court of the United States for the Western of Michigan, Northern Division. In re condemnation of lands of St. Marys Ship Canal, etc. Request for findings on facts and law. Filed Dec. 27, 1911. Chas. L. Fitch, clerk.

90 UNITED STATES OF AMERICA

The Circuit Court of the United States for the Western District of Michigan, Northern Division.

No. 638.

In the matter of the condemnation of all lands and property of every kind and description north of the present Saint Marys Falls Ship Canal throughout its entire length and lying between said ship canal and the international boundary line at Sault Ste. Marie, in the State of Michigan.

Counsel for the respondent, the Chandler Dunbar Water Power Company, request the court to make in this case special findings upon the facts and conclusions of law.

A. B. ELDREDGE,
Attorney for the Chandler Dunbar Water Power Co.

(Endorsed:) No. 638. In the Circuit Court of the United States for the Western District of Michigan, Northern Division. In re condemnation of certain lands north of St. Marys Falls Ship Canal. Request for findings. Filed Dec. 27, 1911. Chas. L. Fitch, clerk. A. B. Eldredge, attorney for respondent, Chandler Dunbar Water Power Co.

91 *Findings of fact requested by all parties.*

92 UNITED STATES OF AMERICA.

In the United States Circuit Court, Western District of Michigan, Northern Division.

In re petition of the United States for condemnation of all lands and property north of Saint Marys Falls Ship Canal to the international boundary at Sault Ste. Marie, Michigan.

PETITIONER'S REQUESTS FOR SPECIFIC FINDINGS OF FACT.

The court having been requested to file specific findings of fact and law, now comes the Government of the United States of American, by its attorneys, and requests the court to specifically find the following facts:

I.

That Saint Marys River is a public navigable stream and a part of the Great Lakes system.

II.

93 That the village of Sault Ste. Marie and its successor, the city of Sault Ste. Marie, have never, nor have either of them, used, worked, or improved that part of Portage Street, so called, as is particularly described in the third description.

III.

That the Chandler-Dunbar Water Power Company has never used, occupied, or enjoyed said Portage Street to the exclusion of the Government and adversely to the Government, nor has said company used, occupied, or enjoyed any part thereof adversely to the Government.

F. C. WETMORE,
U. S. District Attorney.
R. T. STRICKLAND,
WM. K. CLUTE,
GRANT FELLOWS,
Of Counsel,
Attorneys for Petitioner.

Lodged with me Oct. 19, 1911.

ARTHUR C. DENISON, *C. J.*

94 United States Circuit Court for the Western District of Michigan, Northern Division.

No. 638.

In the matter of the petition of the United States for condemnation of all the lands north of the St. Marys Falls Ship Canal to the international boundary.

The petitioner respectfully requests the court to make the following specific finding of fact in addition to those heretofore requested:

1. I find that each and all of the various works of the Chandler-Dunbar Company and the Edison Sault Electric Company and their predecessors, for the purpose of water-power development in the St. Mary's River at the Falls, have been constructed on the submerged lands in St. Mary's River, north of the ship canal and locks at Sault Ste. Marie, under the authority from the Secretary of War, as appears in certain revocable licenses or permits, and that none of such works to develop power or incident thereto on the submerged lands have been erected by them, or any of them, save by the authority of the Secretary of War, and no other entry or occupation of the submerged lands has existed or taken place by any of said companies or individuals save under the authority of the Secretary of War as contained therein.

95 2. I further find that all such licenses or permits have been revoked by the Secretary of War and notice of such revocation given to the respective companies; that said revocable permits are numbered plaintiff's Exhibit #44 and the revocations thereof are numbered plaintiff's Exhibit #—, and they constitute a part of this finding as they appear.

WILLIAM K. CLUTE and
GRANT FELLOWS,
Special Assistant U. S. Attorneys.

96 In the Circuit Court of the United States for the Western District of Michigan, Northern Division.

[As filed, this paper contained no period marks. For record all such marks should be disregarded.—A. C. D.]

UNITED STATES, PETITIONER, *vs.* CHANDLER-DUNBAR WATER POWER COMPANY, impleaded with others, respondents.	No. 638.

FINDINGS OF FACT REQUESTED BY CHANDLER-DUNBAR WATER POWER CO.

I. The stretch of water called St. Mary's Falls, or St. Mary's Rapids, is about 3,000 feet long, and was, in its natural state, from

bank to bank, 4,500 feet wide. In passing this space the waters from Lake Superior fall some 18 feet, and are the potential basis of a very large water power. There are islands upon the Canadian side, and the international boundary line, midway between the main banks, is near the main channel shore of these islands, whereby it results that if there were no artificial obstructions substantially two-thirds of the flow of water would be upon the American side of the line.

These waters have always constituted a recognized part of the navigable waters of the great lakes system. The Indian, French, and colonial commerce, in furs and Indian supplies, passed over the rapids in canoes and bateaus. In the upland traffic the greater part of the materials was disembarked and carried around the rapids over a short portage, while the canoes themselves, with their loads,
97 downbound and light upbound, passed over the rapids. In addition to canoes and barges, small schooners as large as 75 tons were occasionally floated down the rapids, instances being recorded as early as 1775 and as late as 1846, and Mackinaw boats of 50 feet were taken up.

As commerce increased, its necessities were met by a tramway supplanting the old portage, and the cargoes of both up and down boats were transshipped and carried along this tramway of about a mile.

II. Later canals were built reaching from above the rapids to below the rapids and lift locks were placed in such canals, both on the Canadian side and on the American side of the falls.

III. As commerce increased the canals were increased in size and efficiency and larger locks built until the present time.

IV. Between the north line of the canal grant, on the American side, and the shore of the upper rapids there remained a block of land some 2,500 feet long and varying throughout most of its length from 150 to 250 feet in width.

V. This intervening strip, according to the Whelpley plat, contained a village lot (3); parts of private claims 3, 4, 95, and 96; part of a former Indian reservation; and part of the land which had been platted within the lines of what had been platted as part of Portage Street.

VI. The fall in the river, the water power of which is the subject of the main contention herein, was in the rapids fronting on the upper part of the so-called Indian reservation.

VII. All this property excepting an undivided half of a part of village lot 3 and a part of private claim No. 3 was owned at the time of the taking herein by the Chandler-Dunbar Water Power Company excepting only a strip thereof of the width of about 100 feet lying next north of the north side of the canal grant, which was in January, 1908, conveyed by the said company to the United States.

The other undivided half of part of village lot 3 and part of private claim No. 3 was owned by Saulte Ste. Marie Bridge Company, operating an international railroad bridge across the
98 River St. Mary.

VIII. The part of the so-called Indian reservation involved herein was entered by Wm. Chandler by use of Porterfield scrip on application made in 1880, resulting in issue of patent in 1883.

The cost to the patentee of this parcel containing about nine acres was inconsiderable except for the large expense of contest and appeal on application to enter.

IX. Title to this property came to the Chandler-Dunbar Water Power Company from Mr. Chandler.

X. The United States made claim that the patent to the Indian reservation did not operate to convey two islands numbered 1 and 2 in the bed of the stream and that the patent was invalid for the reason that the land therein described was in fact not subject to entry because it was an Indian reservation and because the same had not been properly surveyed. The United States filed its bill to establish its title to said islands and the Supreme Court of the United States finally, in 1908, held that the statute of limitations had run against any direct attack upon the validity of the patent and that the patent carried title to the islands.

XI. In 1907 (there being two locks on the American side) it was decided to construct a third parallel lock. For this and for canal widening, then and before then determined on, more land became necessary, and after long negotiations the Chandler-Dunbar Water Power Company quit-claimed to the United States in January, 1908, the strip of land 2,500 feet long and averaging 100 feet wide along the upper side of the canal lands before referred to,
99 thus correspondingly lessening the width of the strip remaining to private ownership. This quit-claim was for a nominal money consideration, but in connection with substantial benefits hereinafter mentioned.

A fourth lock was then and now is in indefinite contemplation.

XII. In March, 1909, Congress by act approved March 3, 1909, enacted that the United States would take not merely the land presently necessary for the fourth lock, called the Davis lock, but all the privately-owned property between the northerly existing canal strip and the international boundary line in the St. Mary's River.

Secretary of War filed with the register of deeds of Chippewa County, Michigan, wherein said premises lie, on December 30, 1909, the necessary instrument declaring the taking and proceeded with construction work. This action is to fix "just compensation" to be paid to the property owners for the property so taken. Preliminary thereto the United States offered and the Chandler-Dunbar Water Power Company refused $375,000 for its property herein involved.

XIII. By consent of the parties in writing, duly signed and filed with the clerk of this court, the matter was tried and submitted to this court without a jury with the expectation that in this way could be had a complete finding of facts upon which the appropriate award could be finally made by this or a reviewing court. Pend-

ing trial the rights of the Edison Sault Electric Company and the Sault Ste. Marie Bridge Company have been adjusted by agreement, so that the chief matter in dispute is the extent and value of the water-power rights for which compensation is due.

100 XIV. The so-called river at the point now involved has many of the characteristics of a strait; indeed, save for the one element of swift current, these characteristics predominate. If we look at a map and obliterate St. George's and the other islands, it is apparent that Lake Huron, by an arm or bay, reaches practically the foot of the rapids, and Lake Superior, by a similar but a very short arm touches the head. If we consider the Neebish rapids as inconsistent with the lake character of the Huron arm, we may then find an intermediate lake between the Sault and the Neebish; indeed, this was formerly mapped as "Lake George" and "Hay Lake," and I can find no logical distinction between that ownership of submerged land to the thread of the stream which carries title to an island and that ownership to which attaches the right to the flow and fall of the water thereover. I conclude, therefore, that the Chandler-Dunbar Water Power Company must in a general preliminary way be considered the general owners of the water-power rights in question. The peculiar conditions affecting this general ownership will be considered later.

XV. No question exists as to the necessity for taking the dry land. It will all be directly required for the proposed locks, canal, and forebay, and use for these purposes is use of navigation. As to the submerged lands out to the boundary, the matter is not clear. A large part is clearly not directly necessary at present for the needs of navigation; but such part is so connected with and incidental to the other directly and presently necessary portion as to be affected by and brought within the same pervading neces-

101 sity, and as to make it proper for Congress to take the whole.

And I find here, as to all the property described, a necessity for taking for public use, as matter of fact as well as of law.

XVI. The necessity for taking all, as applied to the facts here, is a necessity of peculiar character. It may be called constructive, as distinguished from an actual necessity. As to the excess beyond a certain amount of land and water, the taking is secondary and incidental to the taking of the primary body now needed.

XVII. In the instant case the fact is that if no water was to be used beyond 4,000 c. s. f. (that is, a flow of 4,000 cubic feet per second) and no land was to be occupied beyond the amount necessary for locks and appurtenant structures to use that amount of water according to present methods the remaining water could be made to flow over the remaining land and to develop thereon its full power.

XVIII. The amount of water flowing out of Lake Superior depends primarily upon the height of the lake, and this has fluctuated over a margin of about three feet during the past fifty years. During the 47-year period ending 1907 the average flow was about 80,000

c. s. f.; for the 25-year period ending with 1909 about 75,000 c. s. f. For the years 1907–8–9 the average flow was slightly above 64,000 c. s. f., and this is the proper measure for this case.

The general well-known alarm about lowering lake levels and fear of still lower, would, in the mind of an intending purchaser and his advising engineers, counter-balance the theoretical possibility of rising levels.

102 XIX. I find that between the upper and lower lines of the Chandler Dunbar property, extended at right angles to the thread of the stream, the fall is substantially ten feet, with an effective head of nine feet, and that every 100 c. s. f. of flow equals 100 theoretical horse power (on the wheel) or 70 electrical horse power (on the switch board).

XX. I find that two-thirds of the total flow would under natural conditions flow over the Chandler-Dunbar Water Power Company's submerged lands.

XXI. The questions of what customers there are for the power, what others can be induced to become customers, how profitable a business they could conduct, and what they could afford to or would pay for mechanical or electrical horse-power, as well as the cost of the various schemes of development—all are relevant as bearing on the present value of the raw, unimproved power. There is a present established demand for a comparatively small amount. The natural increase from the ordinary growth of the community will not more than counterbalance the loss when the Government construction work ceases. Any further demand must be created by the promotion of power-consuming concerns. The plan for promoting or securing a wood-pulp mill which would consume all the available power, storing, if necessary, its surplus product during the months of high water, is feasible and is reasonably probable of execution. Such probability is sufficiently definite and certain to justify the conclusion that all the power has a definite value, instead of the conclusion that most of it is too speculative for computation. I fix the annual value of the raw power, per theoretical horse power, as follows: For

103 the first 3,000 h. p., $10.00 each; for the second 3,000 h. p., $7.50 each; for all beyond 6,000 h. p., $5.00 each. The cost of development so far made should be added. These values are on the basis of a perfect and unincumbered right to the water.

XXII. I find that the proper basis for capitalization is ten per cent.

XXIII. The amount of commerce passing the rapids is beyond comparison with any other analogous waterway in the world. Indeed, perhaps, there is no analogous waterway. A high estimate of the value of the entire flow of the river for power would not exceed two million dollars per year, while the value of the river to the public as a commercial waterway is doubtless fifty times that amount. In the ordinary power stream the element of navigation is dormant and insignificant; here is it active and overwhelming, and it is the power element which is comparatively insignificant.

XXIV. The increase in navigation has been on geometrical ratio. The dream of one decade has been the reality of the next. One lock, planned for all future needs, has become inadequate before it was finished. We can fix what seems to be the maximum future limitations for this commerce, but such estimates may be as inaccurate as were those made twenty-five years ago.

XXV. If the upland in controversy had been taken for enlargement of canal and locks, the riparian would have had no remaining upland to use in connection with the power development.

Such development upon the submerged land carried unusual expense and contingencies.

104 XXVI. Additional locks, canals, forebays, etc., can be built to advantage only on the submerged land. Congress might think best to provide a large number of locks, so that the great blockades which occasionally occur could be cleared away in a few hours, although most of the locks would be idle most of the time. It is not inconceivable, though improbable, to suppose that structures of this class will eventually occupy all the space not needed to pass floatable products. Then the surplus water must be diverted elsewhere. So, too, it is conceivable that Congress might construct works further down stream, flowing this space with slack water and getting all the fall at a lower point. In either case, there would be no compensation for such diversion of the flow from this land. The riparian has no property in the water, but only the usufruct, and as appurtenant to the submerged land; and if his title to the land fails, through the assertion of a superior title, he has no remaining interest in the water; nor is it apparent how, if his title fails to part of the channel, he has any right to have the water normally flowing thereover diverted to that other part of the channel, the title to which he retains.

XXVII. The present use of the water, in direct aid of navigation, is only for filling and operating locks and for floating a few logs. The best expert judgment, both of the Waterways Commission and of the witnesses of this case is that 4,000 c. s. f. is the maximum amount which will ever be needed for these purposes, and therefore, the amount to be needed for navigation, so far as the same can now be definitely determined, must be fixed at this figure, leaving the

105 balance beyond need for navigation. I think, however, that owing to all the contingencies involved, and above and below recited, it is impossible to fix this amount with sufficient certainty to make any definite finding of fact relating thereto, except as in this and in other paragraphs stated.

XXVIII. Other methods of using the water in direct aid of navigation may be found, requiring more or all of the water. For example, smoothing out the bed could be made to give an even flow five feet deep, and up a part of such a channel light draft vessels could be hauled by the power generated from the water generated in the remainder of the channel. For further example, the whole power might be employed to operate a ship railway transporting ves-

sels around the rapids; or a floatable product may develop, requiring must of the width of the channel in order properly to be floated down. All these examples are highly improbable—probably fantastic—but not more so than the present volume of this commerce or the present methods of transmitting this power would have been a few years ago.

XXIX. The practice of the riparians heretofore has been to obtain a permit to construct any works upon the submerged lands in the bed of the river, and these permits have been revocable in form, and those heretofore given have been revoked (so far, at least, as it was competent to revoke the same).

XXX. The contemplated method of developing the whole power is by dam across the American part of the river, and it might be well within the limits of proper discretion for the Government not to permit such a structure.

106 No reason has been shown, and I see none, why it would not be feasible for such a dam, under private ownership and management, to be fully subject to governmental control and regulation in all matters affecting navigation; but such divided control might cause complications. There is no clear authority therefore, and, in the absence of further legislation, the engineering officers might find room within the limits of sound discretion and good faith to refuse such a permit.

XXXI. From natural causes the lake levels fluctuate over periods of years and even from year to year. Artificial causes, like the Chicago Drainage Canal, contribute. Every additional foot of water that can be had is of immense value. It may be desirable to hold back the waters of Lake Superior to maintain or raise the level there; or it may be best, artificially, to increase the discharge for the benefit of the lower lakes. Both of these things have been done. During part of every year during recent years the United States engineers have wholly stopped the flow of water through the Michigan Lake Superior power canal, thus greatly lessening its value as a power producer.

XXXII. It is for the interest of a power plant in the rapids that the river flow shall be constant and that the fluctuations should be in Lake Superior. It is for the interest of navigation in that lake that its level shall be constant and that the fluctuation shall be in the river flow.

XXXIII. There are enthusiastic advocates of a plan for a series of dams in Niagara, Detroit, St. Clair, and St. Mary's Rivers,

107 giving slack water navigation for vessels of 25 feet draft from Duluth to Buffalo. The execution of such a plan might and probably would obliterate this water power at this point and transfer it down the river.

XXXIV. However unlikely this last-named plan may be, it is agreed by all that controlling works, consisting of some kind of a dam across the entire St. Mary's River, built and operated through some joint arrangement with Canada, and by which the level of

Lake Superior and its outflow could be regulated would be an extremely desirable thing for both countries, and of great value to the commerce of the upper and lower lakes.

XXXV. Such a structure I regard as within the fair limits of possibility in the not very distant future. Its erection, if at some other point, would incidentally destroy the power inchoate at this point, and if the erection was at this point there would be a physical taking of a great part or all of the Chandler-Dunbar submerged lands, and the water power produced would be in the nature of an incidental by-product of the main navigation use.

XXXVI. It is claimed, on behalf of the United States, that the maintenance of the lock and canal causes the Chandler-Dunbar lands, upland and submerged, to be wholly inaccessible, except by crossing the Government canal; that the Government might, and quite likely would, refuse to permit such crossings; and that, therefore, the Chandler-Dunbar Company would not get raw manufacturing materials to its property nor get the manufactured product away from its property. On the other hand, respondents claim
108 that there would be a way of necessity. Any general access by bridge across the canal would be so burdensome to navigation that the right to insist upon it must be very doubtful. However, it would not be necessary. There is no reason why ordinary foot traffic cannot cross the canal upon the lock gates, as it continually does.

The railroad affords access for heavy traffic, and the maintenance of a side track into this property was one of the things expected and arranged for when the quit-claim deed of January, 1908, was given. It may well be that no understanding with the engineer officers when this quit-claim was offered could create a right as against the United States, but it may well be sufficient to prevent the presumption that the United States will hereafter take an arbitrary and unjust advantage. Further, under the Chandler-Dunbar Company's riparian rights in this deed, it has a prima facie right to connect its property along the rapids with claims 95 and 96, and through the latter it has full access to deep water navigation on Lake Superior. If electricity was manufactured and was to be sold the transmission wires must cross the canal, but this could be done, as is now done, by conduit under the canal, and the probability that the Government would refuse such necessity and harmless privilege is not great enough to be taken into accounts in assessing damages.

XXXVII. The plan for improvement proposed by the Chandler-Dunbar Water Power Company and the only possible (the most possible and economical) plan which the record indicates, is the building of a dam at approximately right angles with the stream along the lower boundary of the Chandler-Dunbar submerged land, out to the thread of the stream, and then the extension of this dam as a wing dam or dike, upstream, along the international
109 boundary line. Theoretically, this would impound, upon the American side of the dike, and pass over the dam, the same

water which would naturally flow over the same submerged land. As this is the only plan suggested, its feasibility is the only thing to consider.

XXXVIII. Obviously, the erection of such a structure would, practically, affect the amount of water flowing on the Canadian side of the dividing wall. If, according to one suggestion, the crest of the natural rock dam, at the head of the rapids, on the American side of this dike, should be scalped down a few feet in order to avoid friction, and get better conditions on the wheels, the tendency would be to divert water from the Canadian to the American side.

So, unless the wheels were so regulated as always to carry away exactly the proper amount, the tendency would be either to pull water into the American channel or to retard the flow on that side and flood the other side. These probable and possible effects might or might not be equalized by the erection of compensating works in the rapids, or by using the Michigan Lake Superior Power Canal for compensating purposes, but these things would be beyond the control of the Chandler-Dunbar Company.

XXXIX. The converse situation from that suggested in the preceding paragraph may exist. So far as we are informed by this record, the Canadian Government, as sovereign or as a proprietor, might see fit to remove the crest of the rock dam on its side of the dividing wall, or widen and deepen the existing Canadian power canal, and thereby divert to the Canadian side a great part or even all of the water, leaving the Chandler-Dunbar submerged land no longer submerged. To what court could it resort for injunc-
110 tion or to recover damages?

It is a natural conclusion, from these two just mentioned considerations, that the full power could not be developed by the proposed plan excepting subject to the contingency that a foreign government would acquiesce, or that, if it did not acquiesce, the United States Government would succeed in making the necessary further treaty. In other words, the proposed development cannot be fully accomplished subject to the protection of the law of the land.

XL. The proposed structure, especially in connection with the proposed manufacturing plant built upon piers and covering a great part or all of the submerged land, would be an obstruction to the ice which comes down in the spring in enormous quantities, and would tend to cause an ice jam or blockade, which might send the river over its banks, both in the United States and Canada, and might, for example, destroy the locks. The United States Government probably would permit this, if at all, only in connection with a very large and complete reserved right of regulation and supervision. The Canadian Government, also, might protest against such a structure. Indeed, its construction would not unnaturally lead to a similar structure on the Canadian side, and there would of necessity be a joint supervision and regulation which in turn could only be brought about by further international agree-

ment. Such regulation, whatever form it might take, injects another element of uncertainty into the situation.

XLI. For about twenty years the Chandler-Dunbar Company or its predecessors, or some one claiming under it, has been developing power in the rapids. This was accomplished by a short
111 transverse dam near the lower boundary of its line extending but a short distance into the stream and then extending up along the bed of the stream (substantially) parallel to the bank up to the head of the rapids. This dam or wall, toward its upper end, diverged out into the stream, the better to divert water into the head race and fore bay formed by its lower part. Earlier structures of this character were replaced about 1901 by those more extensive ones which existed when this condemnation was made. While considerable in extent and cost, they are inconsiderable as compared with the structures now proposed to utilize the whole power, and they were, comparatively speaking, along the bank rather than across the stream. Development of power thereby would be subject to some of the special objections and difficulties which have above been noted, but to many, and perhaps the majority, of such objections it would not be subject, or if subject thereto, would be so in a degree very much less than the proposed plan for entire development. From year to year these developers have added to their investment relating to and depending therein, until such investment, at the time of this taking, amounted to approximately $500,000. The public lighting of the city of Sault Ste. Marie and the maintenance of various industries there were dependent on the power so developed. The United States itself, or contractors working on its public works, has for some years taken electric power from this source and paid therefor to these private parties.

XLII. About 1902 the Michigan Lake Superior Power Company completed a canal from St. Marys River, above the rapids, to slack water below the rapids. This canal was planned to carry 30,000 c. s. f. or more. It has actually been carrying about 10,000
112 c. s. f. excepting when this flow has been temporarily diminished or stopped by the United States engineers when the Lake Superior level reached the determined minimum. Allied interests constructed upon the Canadian side of the river compensating works, originally supposed to divert from the Canadian to the American side as much water as was to be taken by this Michigan Lake Superior Power Company Canal, but whether such compensating works had such effect is in dispute and is not shown by this record. Both Governments have, however, now for a long period of years permitted 10,000 c. s. f. to be used for developing power through this channel, and it is the plan and expectation of the present officials of the War Department and the present engineering officers in charge of these works to permit 10,000 c. s. f. or more of water to pass through this power canal under average conditions and to receive payment therefor by way of a license or rental, as

contemplated by the act of March, 1909, with reference to surplus water.

XLIII. The plans and specifications approved by the War Department and the engineers, forming part of this general project and now in process of execution, provide for dams, cross and longitudinal, similar to those now in existence, but further out into the bed of the stream. By this structure it is the plan and expectation of such department and of such officials to develop water power for sale, pursuant to the provision of this act regarding surplus water.

XLIV. The existing structures built by or under the Chandler-Dunbar Company are in connection with a tail race excavated upon the below-lying public river bed, whereby there is at the
113 power house a fall of 15 feet instead of only the 10-foot fall which exists on the Chandler-Dunbar property. The existing dam provided for the contemplated setting 9 wheels, each capable of developing under the 15-foot head, 500 horsepower, making a total planned and partly executed development of 4,500 horsepower (electrical, equalling 6,500 theoretical). At the time of condemnation four such wheels had been set and were in use. Suitable wheels in the same location and under a nine-foot head would develop 225 horsepower (electrical) each. The upstream and cross-section area of the resent head race will impound and divert into the head race 6,355 c. s. f., which would be sufficient under a 15-foot head to develop 9,750 horsepower, or, under a 9-foot effective head, to develop 6,500 horsepower (both theoretical).

LXV. The proposed United States structures in the bed of the stream will furnish water for a developed 14,500 horsepower under a 15-foot head, or 8,700 horsepower under a 9-foot effective head (both theoretical) (volume of flow being 8,506 c. s. f.).

XLVI. The permitted and contemplated diversion through the Michigan Lake Superior Power Canal was, right or wrong, supposed not to diminish the flow of water through the rapids on the American side, and the fact that it was attended by such a supposition destroys its evidential force to show that such diverted water is subject to appropriation for power.

XLVII. The present United States project (for creating power in the rapids) will always be under its control. The Government is not inviting or permitting anyone else to make an expense. It is
114 itself making the *the* expense, and if it chooses to abandon the plan as an unsuccessful experiment immediately on its initiation no one can complain.

XLVIII. The circumstances under which the Chandler-Dunbar development has been made are, in my judgment, sufficient to establish that the amount seized or impounded thereby is and will be surplus water not needed directly or indirectly for navigation save by that species of constructive need with reference to which the facts have hereinbefore been found, and which has been adjudged not sufficient to destroy the right of compensation.

XLIX. The amount of water sufficient to develop 6,500 horsepower (4,500 electrical on the property of the Chandler-Dunbar Company, that is, on a 10-foot fall) is the proper figure to be taken in this connection. True, so much water in cubic second-feet has not yet been passed through the head race, and could not be, in its present form. Some enlargement of the head opening would be necessary, but the improvements were planned for this 4,500 horsepower, an investment was made and a business built up on such plan, the tail race which would allow this power to be developed with a small amount of water was permitted, and the acquiescence of the Government agents and the public was in a plan which contemplated and called for so much water as might be necessary to develop 4,500 horsepower; and I think it was included in such plan that such development would be wholly upon the Chandler-Dunbar property, if the tail race privilege should not be continued. This, then, justifies and calls for a finding, which is, in form, a finding of fact, but which as I view it, is only a question of drawing the proper legal inference from the various facts found, to the effect that water
115 sufficient to develop 6,500 horsepower (theoretical) on the property of the Chandler-Dunbar Company, is surplus water for which compensation should be assessed in this proceeding.

L. Under the methods already stated, such 6,500 horsepower has an annual value of $55,000, and this capitalized at ten per cent amounts to a present value of $550,000.

LI. This tract of land, comprising the Chandler entry, part of Portage Street, and part of private land claim No. 3, has an independent value. It is preeminently fitted for a manufacturing site in connection with the water power to be developed. It also has value in connection with the probability that it would be needed for lock and canal purposes. The private owner, in such proceedings as this, is not entitled to receive for a piece of property indispensable to the public improvement such amount as it is worth to the public for the improvement, since upon this method of computation condemnation for public improvements would be impossible; but the fact that the property is so situated that it may sometime be desired for a public improvement is one of the elements to be considered in determining just compensation when it is so required and taken. The value of this parcel is subject to many contingencies, but I fix the same as follows (including railroad side track, buildings, and cable tunnel): For uses wholly disconnected with water power development or public improvement, that is to say, for all general purposes, like residences or hotels, factory sites disconnected with this water power, etc., $20,000. For a factory site in connection with the proposed development of the entire water power to use thereon
116 in in connection therewith, 30,000 horsepower or more, $100,000. For use as factory site in connection with the development of 6,500 horsepower, either as a single site or for several smaller factories to use the surplus of 6,500 horsepower not now used

in the city, $40,000. The fact that it was desirable for use for lock and canal purposes gives it an additional value element, in each case of $25,000.

LII. Having reached the conclusions above stated as to the amount of water power, which is, for the purposes of this case, shown to be permanently available in connection with this land and as to the value for lock and canal purposes, it follows that the value of this parcel for this proceeding should be taken as $65,000.

LIII. There is no occasion to apportion this between the Chandler entry and private claim No. 3. The Protage Street subparcel is seven per cent in area of the whole parcel, and is entitled to seven per cent of the values found in this paragraph. The fall appurtenant to this Portage Street parcel is so insignificant as to be negligible, and no water-power rights, as such, in connection with this parcel, are entitled to any compensation.

LIV. Claims 95 and 96. These front upon deed water, above the head of the rapids. They have been used for wharfage for many years, and the wharf structures and the filling now located thereon and extending therefrom have cost, approximately, $12,000. On the submerged land appurtenant to them (or to the parts sold January 22nd, 1908, by the deed reserving all riparian rights) spoil from the lock work has been and is being dumped. It was part of the consideration for this quit claim of 1908, by the Chandler-Dunbar
117 Company, that this fill and dump should be made by the United States, and the complete carrying out of this plan in good faith as then contemplated would have given a large frontage and a considerable area along the upper river supported by these two private claims. I fix the values of these two claims, and the dump and fill, made or which should have been made, all as one parcel, as follows: For general wharfage, dock, and warehouse purposes disconnected with the development of power in the rapids, and not in association with the land along the rapids, $10,000. By reason of its desirability for lock and canal purposes, an additional $10,000. In connection with the land along the rapids, if used as a part of the development of the 4,500 horsepower, an additional value of $5,000. To be used in association with the land along the rapids for the development of the entire 40,000 horsepower a still additional value of $25,000.

For the reasons stated, the owners are entitled to the general purpose or base value plus the canal and lock value element plus the 4,500 horsepower value element, making a total value of $25,000.

LV. The existing dike is now used as the outside wall of the head race, to bring the water to the mill site in the existing development of 4,500 horsepower. It would not be material whether the award was for the value of water so delivered or for the value of the raw power plus the cost of such delivery. The latter plan having been adopted, the Chandler-Dunbar Company is entitled to the value of this dike, which I fix at $———.

LVI. I find that over practically the whole rapids of the River St. Mary, the thread of the stream or "Thalweg" and the international boundary are substantially coincident.

118 LVII. The history of the Michigan Lake Superior Power Company enterprise has been stated. Litigation has been long pending and is still pending between the Chandler-Dunbar Company and the Michigan Lake Superior Company. The former claims that whatever water goes through the power canal is unlawfully diverted from flowing over the Chandler-Dunbar subaqueous lands, and that this water must be restored to its natural channel; the latter disputes this claim, for various reasons, and, among others, upon the ground of an alleged personal estoppal against the Chandler-Dunbar Company. If, in this present proceeding, an award was made on account of the entire 40,000 c. s. f. normally flowing on the American side of the channel, it would be necessary to determine whether the Michigan Lake Superior Company was entitled to part of that award. However, this becomes unnecessary, in view of the conclusion elsewhere reached that compensation should be awarded to the riparian for only 4,500 horsepower. Whatever goes through the Michigan Lake Superior power canal is from the surplus above 4,500 as to which surplus the Chandler-Dunbar Company has not sufficiently established any right to compensation.

LVIII. The city of Sault Ste. Marie grew up on United States public land. Streets were laid out, and lots and parcels enclosed and occupied without express authority. In 1850 Congress directed a survey and a plat to be made, and, accordingly the land office made the Whelpley survey. This indicated the streets, the private claims, the vacant lots, the Indian reservation and then then (1855) existing canal grant. Apparently upon the supposition that Portage Street had been a de facto street extending to the river before the canal property was granted and the canal built, this survey shows Portage Street continuing from the north bank of the canal

119 to the south bank of the river, although such portion of the street was, upon the face of the map inaccessible from the remainder of the street. Later, in 1879, pursuant to this survey, patent was granted for lot 3, described simply as "Lot 3." Still later, when the Chandler patent was granted, the land conveyed was described as bounded on the south by Portage Street, and particularly by a line which was in fact the northeast line of Portage Street.

LIX. The city never, in any manner, did anything indicating an acceptance of that portion of the street north of the canal, although on the south of the canal it improved and occupied the street in the usual manner. The parcel north of the canal has always remained wholly vacant and unoccupied save for the occupation by the Chandler-Dunbar Company, hereafter mentioned. I conclude, therefore, that there never has been any acceptance by the city of

this dedication, and that it never acquired thereto any title for which it is now entitled to compensation.

LX. The fall of water appurtenant to the frontage of this parcel upon the river, is two-tenths of a foot. This is negligible and this parcel is not entitled to any award of damages on account of appurtenant water power. Nor should such award as is made to the Chandler-Dunbar Company, on account of the water, be diminished on this account.

A. B. ELDREDGE,
Solicitor for C.-D. W. Power Co.

120 On application of Wm. B. Cady to enter with Porterfield scrip that parcel of land north of the canal grant included within the lands of Portage Street, so-called, the Commissioner of the General Land Office decided that the fee title to such land had passed from the United States to the adjoining owners of the adjacent parcels of land, to wit, to the part of the Indian reservation on the northeast side and to the vacant lot No. 3 on the southwest side.

A. B. ELDREDGE,
Solicitor for C.-D. W. Power Co.

LXII. (a) The contemplated diversion of water from the river where it passes the St. Mary's Rapids through the Michigan Lake Superior Power Company's canal, was, right or wrong, supposed by the Chandler-Dunbar Water Power Company not to diminish the flow through the rapids on the American side.

Such supposition was not, however, entertained after the spring of 1902.

(Filed by Moses Hooper.)

121 In the United States Court for the Western District of Michigan, Northern Division.

UNITED STATES OF AMERICA, PETITIONER,
vs.
CHANDLER-DUNBAR WATER POWER COMPANY, EDISON SAULT Electric Company, impleaded with others. } No. 638.

Counsel for Edison Sault Electric Company request the court to make the following specific finding of fact.

1. The respondent, the Edison Sault Electric Company, at the time of taking, by the Secretary of War, of its leasehold interest, had a lease, to it, its successors and assigns, from the respondent Chandler-Dunbar Water Power Company, for and during the term of eighty years, commencing on the first day of November, A. D. 1891, and terminating on the first day of November, A. D. 1971, of a piece of land of the said Chandler-Dunbar Water Power Company property, and situated in the city of Sault Ste. Marie, Michigan, bounded as follows: Beginning at a point on the east boundary of the said prop-

erty distant northerly four hundred (400) feet from the southeast corner of the said property; thence continuing northerly along said east boundary three hundred (300) feet; thence westerly at a right angle to the said east boundary two hundred (200) feet; thence southerly parallel to the said east boundary three hundred (300) feet; thence easterly two hundred (200) feet to the place of beginning.

That of the property so as aforesaid taken the said Edison Sault Electric Company at the time of said taking was the owner of certain constructions, viz, a power house and equipment with forebay and tail race appurtenant thereto and certain railroad siding lo-
122 cated on land controlled by said Edison Sault Electric Company and rights in a tunnel and cables under the United States canal, with the extension thereof under the new canal being constructed, and the wires and cables, with conduits and supports joined thereto and serving to convey the electric output of the power plant over and under the United States canal lands to the south boundary thereof, and also a complete distributing system located on Government property and on Chandler-Dunbar Water Power Company property, also five frame warehouses located on Chandler-Dunbar Water Power Company property.

The respondent Edison Sault Electric Company at the time of said taking also owned and operated in conjunction with its power house a complete light and power distribution system, to wit, cables, wires, poles, transformers, lamps, meters, a substantial (substation) site and buildings and appurtenances required for a complete service of electric light and power to the city of Sault Ste. Marie, and the inhabitants thereof, which said distributing plant and system lying south of the St. Marys Falls Canal was diminished in value by the taking of the leasehold interest, power house, and other property of said company lying north of said canal.

A. B. ELDREDGE,
Attorney for Edison Sault Electric Company.

123 As respects Island No. 5.

PROPOSED FINDINGS OF FACT REQUESTED BY COUNSEL FOR ST. MARYS FALLS POWER CO. & M. L. S. POWER COMPANY.

1. The institution of condemnation proceedings following the cash offer made for Island No. 5 operated to vest the title to the island and all rights appurtenant thereto in the St. Marys Falls Power Company.

2. The United States made a cash offer to the St. Marys Falls Power Company, as owner of Island No. 5, of $10,000 in cash for a release of their title and ownership rights in and to said island and its appurtenances. The said offer was refused and subsequently the Government instituted proceedings to condemn in manner and form as appears in the record in this case, which said proceedings were

regular in form and pursuant to the act of Congress under which said proceedings were had.

3. The United States has already permitted the Chandler-Dunbar Company to allow the fall in front of its intervening lands to be joined to that of the Chandler-Dunbar Company, and it would only be necessary to excavate to the additional depth requisite to obtain the two-foot fall opposite Island No. 5 to secure the benefit, uses, and profits that would flow from treating the entire falls fronting upon the Chandler-Dunbar property, the United States property, and that of the St. Marys Falls Power Company as a unit.

124 4. In such case the same amount of water passed through the Chandler-Dunbar Canal or through the Edison power house would produce 1,300 h. p. theoretical additional. The annual value of this amount of power would be from $6,500 to $13,000 and the capital value on a ten per cent basis would be from $65,000 to $130,000.

5. It would be a fair method of compensation to give Island No. 5 a proportion of the total water power based on its proportion of the fall.

6. The value of the water-power rights of Island No. 5 should be and is hereby fixed at two-tenths of the Chandler-Dunbar value for 40,000 h. p. development.

7. Island No. 5 has great value, for which compensation should be paid, for lock and canal purposes. (It has a special desirability for either or both of such purposes.) I find such valuation to be $5,000.

8. Island No. 5 has a strategic value which is of a substantial character and for which compensation should, and must, be given. I find such valuation to be $10,000.

9. If the water situation involved in this suit were treated as a unit or consolidated falls, then, based upon the fall in front of Island No. 5, that part would be entitled to two-tenths of the total value of the water power.

10. Upon the basis upon which values have been determined and damages awarded in this proceeding for the water power, if the rules stated in the foregoing request were applied, the value of the water power appurtenant to Island No. 5 would be no less than $65,000, and not more than $130,000, capitalized upon a ten per cent basis.

125 11. Island No. 5. This island is situated in the American edge of the rapids, below the Chandler-Dunbar property, and opposite that part of the shore already belonging to the United States. It contains about one-third of an acre in area, its length up and down stream is 175 feet, and the amount of fall between the upper and the lower boundary lines extended to the thread of the stream is two feet.

12. The Government urges that the water power appurtenant to this island is worthless, and that no compensation should be assessed therefor, because it is impossible to develop any commercially valuable water power upon a two-foot head. It is true that it would be

impossible for the owners of Island No. 5 to develop water power, of any commercial value, by any known means, within their own upper and lower boundaries; but such fact would not, of itself, be sufficient to prevent the award of damages for the value of such theoretical water power; otherwise, if the frontage happened to be divided into small parcels, the Government could acquire the whole without paying any water-power value to any one.

13. Ordinarily it would be a fair method to give to such a parcel a proportion of the total water power based upon its proportion of the fall, or, in this case, to give it a value as 2 feet is to 12 feet.

14. In view of the disposition made by the court of the controversy, nothing is decided, directly or indirectly, respecting the conflicting claims or rights of the Michigan-Lake Superior Power Company and the Chandler-Dunbar Water Power Company or anyone claiming through or under any of said parties. In other words, any rights of the Michigan-Lake Superior Power Company based upon estoppel or otherwise are not passed upon in this proceeding.

Yours, truly,

B–H. LEO M. BUTZEL.

126 (Endorsed:) United States Circuit Court for the Western District of Michigan, Northern Division. In the matter of the petition of the United States for condemnation of all lands north of the St. Marys Falls Ship Canal to the international boundary. Requests for finding of fact by all parties. Filed Dec. 27, 1911. Chas. L. Fitch, clerk.

127 *Specific requests on conclusions of law by all.*

128 UNITED STATES OF AMERICA.

In the United States Circuit Court, Western District of Michigan, Northern Division.

In re petition of the United States for condemnation of all lands and property north of St. Marys Falls Ship Canal to the international boundary at Saulte Ste. Marie, Michigan.

SPECIFIC REQUESTS ON CONCLUSIONS OF LAW BY THE UNITED STATES OF AMERICA.

The court having been heretofore requested to find the facts and law in writing in this proceeding, it is further requested to make special finding of the facts and to pass specifically upon the following propositions of law:

I. That the Saint Marys River is a public navigable river of the United States continuously from Lake Superior to Lake Huron, is a part of the Great Lake system as a connecting waterway, and the waters thereof are the public property of the Nation and can not be the subject of private ownership. (Approved; covered by opinion.)

II. That the shore of and submerged land under the waters
129 of the St. Marys River are subject to the servitude in respect of navigation created in favor of the Federal Government by the Constitution. (Approved.)

3. That the dominion of the United States over the navigable waters for the purpose of commerce is the same as over the public domain. (Disapproved; stated so broadly.)

4. That it matters little whether the United States has or has not theoretical ownership and dominion in the waters or land under them; it has, what is more, the regulation and control of them for the purpose of commerce. (Approved; covered by opinion.)

5. That the navigable waters of the United States, with their beds, for the purpose of commerce and navigation being the public property of the Nation when any portion of this property is required by the United States for its uses in aid of navigation there is no condemnation necessary. It is only necessary for Congress to order the taking of the part needed for the specified use. (Approved, with the modification that the requirement for navigation must not be too incidental and remote.)

6. That the necessity or experiency of appropriating a part or all of the waters of St. Marys River for public use can not be the subject of judicial cognizance. (Disapproved; stated so broadly.)

7. That the act of March 3, 1909, did not mention specifically that compensation should be paid to the riparian owner for the taking of the waters of St. Marys River, and did not contemplate such
130 a payment, for in section eleven it provided "any moneys payable by the Government under the provisions of this section shall be payable out of any money heretofore authorized or appropriated for the purpose of improving St. Marys River at the falls, Michigan," and the money authorized and appropriated before (heretofore) the passage of said act of March 3, 1909, amounted to only "one hundred thousand dollars" (act of June 30, 1906, 34 Stat. L., 739), and since March 3, 1909, "two hundred and twenty-five thousand dollars" (act of March 4, 1909, 35 Stat. L., 998), these sums together amounting to $325,000, which is $225,000 less than the proposed award for water power, $550,000, leaving nothing for the value of the physical properties and uplands. (Disapproved; covered by opinion.)

8. That there is now no appropriation by Congress out of which the sum of $550,000 may be paid for "water power" and none "heretofore" made for that purpose. (No appropriation appears by this record, but the fact that Congress has not made an appropriation is not controlling.)

9. That the fifth amendment to the Constitution provides only that private property shall not be taken without compensation, making no reference to public property. (Approved.)

10. That while the submerged land remains a part of the bed of the river it is not private property in the sense of the fifth amendment to the Federal Constitution. (Disapproved; stated so broadly.)

11. That compensation cannot be claimed for damages done to riparian owners where property is taken or their rights restricted in aid of commerce and navigation. (Disapproved; stated so broadly. See opinion.)

12. That under the power conferred upon Congress by the Constitution to regulate commerce, the United States possesses,
131 provided Congress sees fit to exercise it, the right to control all structures and works which interfere in any manner with the navigable capacity of navigable waters of the United States, which, either by themselves or in connection with other waters, form channels for interstate commerce. (Approved; but not controlling on the question of compensation. See opinion.)

13. That the creation of any obstruction to the navigable capacity of any of the waters of the United States, not affirmatively authorized by Congress, is unlawful, and it is unlawful to construct or commence the construction of any bridge, dam, dike, or causeway over or in any port roadstead, haven, harbor, canal, navigable river, or other navigable water of the United States until the consent of Congress to the building of such structures shall have been obtained, and until the plans for the same shall have been submitted to and approved by the Chief of Engineers and by the Secretary of War, a violation of which shall be deemed a misdemeanor punishable by a fine or imprisonment. (Sections 9, 10, and 12, act of March 3, 1899, 30 Stat. L., p. 1151.) (Disapproved; so broadly stated.)

14. That in view of the provisions of sections nine, ten, and twelve of said act of March 3, 1909, structures of any character can not lawfully be placed in or over any of the navigable waters of the United States without permits issued by consent of Congress upon the recommendation of the Chief of Engineers, when approved by the Secretary of War. (Same as 13.)

15. That to preserve the navigable waters for purposes of navigation such permits must contain terms and conditions and be revokable at the pleasure of the Government according to the needs of navigation, otherwise the control of said waters would be in
132 part surrendered to private parties. (Approved; but the "needs of navigation" must not be merely imaginary. (See opinion.)

16. That permits were given to erect structures in St. Marys River by consent of Congress and were revoked in no uncertain terms by that body in Section II, act of March 3, 1911, which declared that said permits "shall cease and determine" on a day certain under all circumstances and did not provide any compensation. (This correctly states the record.)

17. That when said permits were revoked no official of the Government had the right to extend or renew the same without the consent of Congress, or to make any compensation therefor. (Approved.)

18. That a court has not the power to decide or assume permits will be issued to persons to erect structures in navigable waters under the control of Congress, in view of the provisions of the act of March

3, 1899. (Approved, but not controlling on the question of compensation; see opinion.)

19. The courts of the United States will take judicial notice that the waters described in the petition and known as St. Marys River is a public navigable waterway of the United States, continuously, from Lake Superior to Lake Huron, it being a part of the Great Lakes system and a connecting waterway therein. (Approved.)

20. There is no legal interruption to the actual navigable capacity and character of said river adjacent to the uplands described in the petition of which said courts will also take judicial notice. (Disapproved; so broadly stated. There is no interruption to the
133 legal, navigable character of this water. Its actual, navigable capacity is much affected by physical facts.)

21. The people of the United States own the right under tre'ties and the law of nations to navigate said waters, from shore to shore, and more particularly under the laws of the United States from the south shore to the international boundary line throughout the full extent of the river, and to use and improve it in aid of such right of navigation, to which right of public ownership and use, private ownership and use of the submerged land therein and water flowing over the same is subservient, and that such navigation right, with all its incidents, is a part of the public domain of the United States and a paramount right in said river. (Disapproved; so broadly stated; see opinion.)

22. The power of the people of the United States to regulate and use all said waters for the purposes of their navigation has been lodged in their Congress. Congress possesses the exclusive right to exercise said power as a political function. (Approved.)

23. The Federal courts possess no power to parcel out the waters of said navigable river between the public and the private owner of the submerged lands, which are appurtenant to the uplands described in the petition, and declare by a judgment or decree that any portion of said navigable waters is not needed for navigation and is surplus water over and above navigation needs, is the absolute private property of the riparian owner, and that, if used by the public in its exercise of the right to regulate navigation on said river, either now or in the future, must be either condemned or bought and paid for from the owner of the fee to such subaqueous lands. (Disapproved; so broadly stated; see opinion.)

134 24. The determination of Congress, by the provision of Section II, act of March 3, 1909; 35 U. S. Stats., p. 820–1–2, of the necessity for the vacation of the river bed of St. Marys River at the falls by private persons or corporations (who have heretofore occupied the same and developed, to a certain extent, water power in said river), because of the public necessity of the occupation thereof, for the purpose of regulating navigation and erecting improvements therein, and requiring said power development companies to vacate the bed of the stream and the taking of the possession thereof and erection upon the submerged lands of public works

in aid of navigation is not a taking of private property for public use within the meaning of the fifth amendment to the Federal Constitution, and requires no condemnation or compensation before such right upon the submerged lands may be exercised. (Disapproved; so broadly stated, as applied to some of the conditions existing in this case.)

25. If, in the installation in said river bed of public works of the Government, primarily intended as improvements to navigation or in the methods of said navigation, carried on by the Government, there may be from time to time found a quantity of water which can be availed of for developing power, it is competent for the Government to conserve and use said power from the economic policy of preventing waste of natural resources; it is merely incident to regulation of navigation and is not a taking of private property without compensation for the Government to use, sell, or lease such possible surplus power so developed by its own works in aid of
135 navigation and apply the proceeds to the public treasury. (Approved; but the intention that the public works shall be an improvement to navigation must be real and not a pretense; if in part a pretense, then, pro tanto, the result specified in this request will not follow.)

26. None of the permits, which are in evidence, that were issued by the Secretary of War to the Chandler-Dunbar Company or the Edison-Sault Company, or their predecessors, relative to their occupancy and use of the river for the purpose of developing power therein created any vested property right as against the organized public seeking to improve navigation, to continue such occupancy of the river bed, and to continue to use and develop such power after the permits were revoked, as by the terms of said permits they were all revocable, and have been revoked. (Approved; but such permits and their history may have evidential force on the subject of what is surplus water appropriated for power; see opinion.)

27. A failure or refusal of said companies or persons so occupying and using said river bed and the waters therein to vacate the river bed after revocation of such permits, and a continued occupancy and possession by them of the same with their structures and machinery for their private uses, is developing power after such revocations were to take effect, constituted them per se public nuisances in said river. (Disapproved; so broadly stated.)

28. The governmental necessity to have the lands described in the petition for the purpose of erecting thereon canals and locks and other public works, in aid of navigation, is not an element of value to be added to making up the owners' award and not an increment of value in said property to which the private owner
136 is entitled. Nor can the favorable location of the property for the installation of canals and locks thereon or a so-called strategic value claims therein be considered as a factor for the purpose of enhancing the value of the property to the private owner in these proceedings, since such value would be made up of

the necessity of the Government to have the property for a public use. Public works herein described are authorized and constructed in the general interests of the people in aid of interstate marine commerce on the Great Lakes, and not for the enhancement of the value of private property upon which they are or may be erected. (Disapproved; as an entirety; see opinion.)

29. By a deed from the Chandler-Dunbar Water Power Co. to the United States, dated Jan. 23, 1908, recorded in liber 67 of deeds, page 54, a certain strip of land located, generally, next north of the then canal lands was deeded to the United States for a recited consideration of one dollar. Certain letters written by the Chandler-Dunbar Co. concerning and claiming as the consideration for said deed various rights of way, trackage privileges, and concessions on and over the said canal lands, in said river, to a certain parcel known as the Government dump, and over other Government property within the reserved lands at the site of the locks and canals, then being erected and now in process of erection, which letters are in evidence, created no vested rights over, upon, and to said lands and in said river bed, as claimed in and by said letters; said lands were all within a Government reservation; they were not open to public entry by any law of the United States and for the purpose of creating any easement, license, permits, incumbrances, or servitudes upon any of the lands described in the petition or any of the other
137 premises in the rapids, or within such reservation, which is claimed to have created any vested interest therein or any greater right than a permit, revocable at the pleasure of the Government under the laws of the United States regulating its public navigable waters or its reservations of public lands are void, and the acts of any officer of the United States having in view the creation or recognition of any such rights upon said lands as claimed by the said company to the extent of creating thereby any vested interest in it were ultra vires acts. (Approved.)

30. If any value above one dollar, the recited consideration in said deed, attaches to said lands and the conveyance thereof to the United States, for which said company is entitled to compensation from the United States, its remedy is not in this proceeding but is in the Court of Claims. (Approved, but the facts referred to in requests 29 and 30 have a bearing on the amount of compensation to be awarded for the further lands now taken.)

31. The declaration of Congress, found in section II of the river and harbor bill (being act of Congress of March 3rd, 1909, Revised Statutes, pages 820–1–2) as follows: "That the ownership in fee simple absolute by the United States of all lands and property of every kind and description north of the present St. Marys Falls Ship Canal throughout its entire length and lying between said ship canal and the international boundary line at Sault Ste. Marie, in the State of Michigan, is necessary for the purpose of navigation of said waters and the waters connected therewith," is conclusive, final, and binding

on this court. (Approved, but the exact character and effect of the necessity declared are questions remaining for consideration.)

32. The subaqueous land and the usufruct of the water
138 adjoining the premises of the Chandler-Dunbar Water Power Company are the public property of the nation and their use is under the control of Congress. (Disapproved.)

33. The Chandler-Dunbar Water Power Company have no private property in the subaqueous land or the usufruct of the water adjoining to its uplands as against the Government which requires compensation by the Government. (Disapproved.)

34. The Chandler-Dunbar Water Power Company have no way of necessity over the Government lands. (Approved.)

35. The title to Portage Street, so called, never passed from the Government and was in the Government at the date of taking. (Approved.)

36. The value of any of the premises for lock and canal purposes cannot be taken into consideration in making the award. (Disapproved.)

37. The strategic value of any of the property taken cannot be considered in making the award. (Disapproved.)

38. Vested rights cannot be acquired under revocable permits from the Government, and the Chandler-Dunbar Water Power Company acquired no vested rights in the St. Marys River by reason of the issuance to them of the revocable permits. (Approved; I give only evidential force to the permits and their history.)

39. Any obstruction in the St. Marys River without the permission of the Government is a nuisance per se. No riparian owner has the right to put any dam or other obstruction in the stream. (Disapproved; so broadly stated. I conceive there might be "obstructions" which could not, by any possibility, injuriously affect any public right.)

40. The Chandler-Dunbar Water Power Company is
139 estopped by reason of its acceptance of the revocable permits from claiming against the Government any private property in the subaqueous lands or the usufruct of the waters of St. Marys River. (Disapproved.)

41. Congress is the only authority that can make an award upon the grounds of moral obligation, and courts in condemnation proceedings are not authorized to make awards against the Government on this ground. (Approved.)

42. Riparian owners along navigable rivers have no private property in such streams against the Government, cannot dam or obstruct them without governmental license, and therefore are not entitled to compensation from the Government when appropriated by the Government for public purposes. (Disapproved so broadly stated.)

43. That the damages to be paid should be determined by the detriment occasioned to the owner of the property taken, and the amount thereof should be neither increased nor diminished by the fact that

the property taken is peculiarly well adapted to the purposes of the exproprietor. Approved; I do not regard this as inconsistent with the conclusion that suitability for lock and canal purposes is one element of value to be considered, because the detriment to the owner consists in the taking of every element of value which the property had.

44. I find as a matter of law under Art. 1, § 3, of the Constitution of the United States, which provides that Congress shall have power "to regulate commerce with foreign nations and among the several States, and with the Indian tribes;" the riparian rights of the Chandler-Dunbar Company in the subaqueous land and the usufruct of the waters flowing over such land are subject to the paramount right of the United States for the purposes of commerce, which includes
140 navigation without condemnation or compensation, such submerged lands and waters being public and not private property. Disapproved; so broadly stated; such waters and submerged lands are not public property, except to the extent necessary for the public purposes.

(Sd.) F. C. WETMORE,
U. S. District Attorney.
R. L. SHEKLAND,
WM. K. CLUTE,
GRANT FELLOWS,
Of Counsel.
Attorneys for Petitioner.

Lodged with me Oct. 19, 1911.
(Sd.) ARTHUR C. DENISON, C. J.

141 In the Circuit Court of the United States for the Western District of Michigan, Northern Division.

UNITED STATES,
vs.
THE CHANDLER-DUNBAR WATER POWER COMPANY, impleaded with others.

(ADDITIONAL) CONCLUSIONS OF LAW REQUESTED BY THE CHANDLER-DUNBAR WATER POWER COMPANY.

I.

Section 11 of act of Congress approved March 3, 1909, read in the light of the report of the Rivers and Harbors Committee, recommending the passage thereof, indicates an intention on the part of Congress to provide for payment to the Chandler-Dunbar Water Power Company of the value of the water power existing on its lands. (Disapproved, so broadly stated.)

II.

When the title of the riparian to the bed and flow of the waters of public navigable rivers is taken by the United States, it must make just compensation for the taking of title, the use being all that is primarily subject to be taken for the purpose of navigation, (Disapproved, so broadly stated.)

III.

The proper and primary right of the United States to the bed and flow of water of public navigable rivers is to use and manipulate the same in the interest of navigation, and it has no power
142 under that claim of right to take the fee title in either the bed or the flow without just compensation for such taking. (Disapproved, so broadly stated; the proper use may be so absolute and permanent that there is no remaining fee of any substantial value.)

IV.

The United States has taken the title to the bed and flow of the St. Marys River, which was property of the Chandler-Dunbar Water Power Company, as a riparian, subject to the paramount right of the United States to use same for purposes of navigation, and of the State of Michigan to use same for purposes of navigation, fishing, bathing, and perhaps municipal water supply.

Just compensation requires payment of the value thereof, diminished only by the effect of such paramount rights, Federal and State, upon such value. Such diminution should be adjusted, not on possibilities of future discoveries or imaginary future methods of navigation, but upon present and fairly calculable future methods and needs. (Disapproved, as to possible interpretation of the last sentence. See opinion.)

V.

The question is, what would the bed and flow of the river appurtenant to the Chandler-Dunbar Water Power Company uplands have probably been worth to that company, or to its successors in title, if the United States had condemned the upland and from time to time taken only so much of the bed and flow as it might need for fullest development and improvement in aid of navigation? (Disapproved, as applied to the facts of the case:)

VI.

143 Such use of the flow of the water and submerged land for private—proprietary—purposes as it appears probable that the United States may and will make, or can properly make, should

be supposed to have been within the capacity of the riparian to make; and just compensation should be fixed on such basis. (Disapproved.)

VII.

In considering the just compensation to be awarded the Chandler-Dunbar Water Power Company on account of the taking of title to this water power, it must be supposed that the United States, while fostering to the *u*pmost the interests of and improvement of navigation, would not cause any interference with or dim*u*n*i*tion of the value of such riparian water power beyond such interference or dim*u*n*i*tion as would be necessary for such fostering of and improvement of navigation. (Approved, but this involves considering the character and extent of the controlling necessity.)

VIII.

Just compensation requires the allowance to the Chandler-Dunbar Water Power Company of the value of the use of the water which the United States has planned to divert into the power canal of the Michigan Lake Superior Company, and to lease by the United States for power purposes. Such allowance not to exceed the value of the use of the same by the Chandler-Dunbar Water Power Company on its submerged lands. (Disapproved.)

IX.

Just compensation requires the allowance to the Chandler-Dunbar Water Power Company of the value of the use of the water which the United States has planned to impound by the present works being now constructed in the bed of the river for power pur-
144 poses. Such allowance not to exceed the value of the use of the same by the Chandler-Dunbar Water Power Company on its submerged lands. (Disapproved.)

X.

The compensation to which the Chandler-Dunbar Water Power Company is entitled for its property taken, cannot be substantially less than the property—proprietary—value acquired by the United States by the taking. (Approved; but the U. S. now acquires by the taking only the servient (in a certain sense) interest which it did not already possess.)

XI.

The United States, by its taking title for other purposes than public and governmental—that is, for the purpose of creating water

power for private—proprietary—use for revenue, has put upon the court the necessity of calculation of the extent and effect of uncertain elements. Hence, the burden of proof is upon the United States to the extent and effect of such uncertain elements. (Disapproved.)

XII.

It appearing that the United States has taken the title to the bed and flow of the St. Marys River belonging to the Chandler-Dunbar Water Power Company, instead of or in addition to the use, and that there is an excess of flow and bed over and above that part, the present use of which is needful for purposes of navigation, and that such excess of flow and bed is of value to the riparian for power purposes, the burden of proof to show the dimunition of such value on account of the dominent estate of the United States to use the same in the interest of navigation rests upon the United States. (Disapproved.)

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XIII.

It is not competent for the United States to take, without compensation, the property of the American riparian at the Sault to satisfy Canada for a taking of common water at some other point. (Disapproved.)

XIV.

It is not competent for the United States to reduce, without just compensation, the water power of the riparian upon the St. Marys River by artificially increasing the discharge from Lake Superior through the St. Marys River in order to counteract the effect upon Lake Michigan-Huron caused by the outflow through the Chicago Drainage Canal.

C. D. Request No. 14. Disapproved, it being understood that the request contemplates increasing the discharge by means which would not increase the flow over the lands of the riparian. I do not think the question with reference to the Chicago Drainage Canal alone exists, but do think that controlling the relative levels of all the great lakes by whatever cause such relative levels might otherwise be affected as a part of the navigation power the exercise of which can not call for compensation.

XV.

If the United States acting under the law for this taking, diverts the water of a navigable river into a channel other than the natural channel and in such artificial channel there is a fall in the flow of the water corresponding to the fall in the flow in the natural channel on the land of the riparian and the United States avails, or may

avail, itself of the power of such fall for profit, in such artificial channel, compensation is due to the riparian. Such compensation should be adjusted on the basis of the value of the use to the
146 United States of that power which is so taken from the natural channel and transferred to the artificial channel, not exceeding its fair value to the riparian for use in the natural channel. (Disapproved; understanding that the transfer to the artificial channel was directly in aid of navigation and not with the primary purpose of producing power.)

XVI.

If in its operations in the interest of navigation at Sault Ste. Marie, under the act for this taking, the United States should build a dam on its own submerged land below the submerged land of the Chandler-Dunbar Water Power Company, and so drown out or obliterate the water power on the Chandler-Dunbar land, the power inherent in the fall of the water in its natural condition on the Chandler-Dunbar lands would be transferred to the dam in the rapids below, and would be in the control of the United States for revenue, and just compensation should be made for its value to the Chandler-Dunbar Company based on the value to the United States of the power so transferred not exceeding its fair value to the company for use on its lands. (Disapproved, understanding that the works specified were primarily in aid of navigation.)

XVII.

If, in the improvement of navigation at the Sault Rapids, under the act for this taking, the water power of the Chandler-Dunbar Company should be transferred in any way from the submerged lands of that company, and brought into conditions where it, including the fall due to the lands of that company, might be used for power by the United States, compensation would be due the Chandler-Dunbar Water Power Company, based upon the
147 value of the use of its power by the United States, not, however, exceeding its value to such company for use by it as a riparian.

C. D. request No. 17. Disapproved. I intend this and the two previous requests to be that a riparian proprietor on this particular waterway and with its special attendant conditions owns the usufruct of the flowing water subject to the contingency that it may be obliterated without compensation to him when such destruction is the incidental effect of works constructed in or along some waterway with the primary purpose of aiding navigation, and that the fair possibility of such destruction, in whole or in part, must be considered in awarding compensation for a taking before such destruction has become imminent.

XVIII.

Presumably the Canadian courts would enforce the rights of American riparian against wrongdoers on the Canadian side of the international boundary. Also, presumably, the Federal courts would enforce the rights of Canadian riparians against wrongdoers on the American side. (Approved, but it does not appear that an American riparian has, as such, any rights on the Canadian side of the boundary.)

(Sd.) A. B. ELDREDGE,
Solicitor for C.-D. Water Power Co.

148 REQUESTS FOR CONCLUSIONS OF LAW.

19. The act of Congress of September 26, 1859, providing for the settlement of claims for land at Sault Ste. Marie, did not authorize any acknowledgment to be made of map of the village therein provided for, but required the map to be transmitted to the Commissioner of the General Land Office.

Under the statute of the State of Michigan in force at the time of the making of said map, called the Whelplay map, a map without an acknowledgment was of no force or validity for purposes of a statutory dedication. (Approved.)

20. Subject to the power of Congress to regulate commerce, the Chandler-Dunbar Water Power Company, as a riparian proprietor, was entitled to the continual natural flow of the water of the River St. Mary past its shore without diminution or alteration. (Approved.)

21. The right to build a wing dam in the bed of the River St. Mary is a common-law right, which has not been modified or changed in Michigan by the constitution or any statute, and is in force in the State of Michigan, excepting as the same is subject to the power of Congress to regulate. (Approved, except as to effect of being on national boundary. See opinion.)

22. The Chandler-Dunbar Water Power Company was not legally required to obtain a permit or consent of the board of supervisors of Chippewa County to put improvement or structure in the River St. Mary. (Approved. Finding XXII.)

23. The Chandler-Dunbar Water Power Company is entitled on account of its water power taken, amounting, on the basis that one-half of the flow of the river is appurtenant to the American shore, to 35,000 theoretical horsepower, to just compensation therefor. (Disapproved.)

149 24. The Chandler-Dunbar Water Power Company is entitled to the value of the use on a nine-foot head of the volume of water planned to be used for water-power purposes by the United States in the bed of the stream. (Disapproved.)

25. In addition to the items named in conclusion XX, the Chandler-Dunbar Water Power Company is entitled to the value of the

use of the volume of water planned to be used for water-power purposes through the Michigan-Lake Superior Power Company's canal, and which such canal has capacity to divert and use, and which amount respondent claims to be 20,000 cubic feet per second. (Disapproved.)

(Sd.) J. H. GOFF,
Acting for Chandler-Dunbar Water Power Co.
MOSES HOOPER,
Of Counsel.

150 REQUESTS ON CONCLUSIONS OF LAW.

(By St. Marys Falls Power Co. and Michigan-L. S. Power Co.)

1. In determining the value to be assigned to Island No. 5, in view of the natural conditions presented, the value of the water power should be determined as a unit proposition, and therefore Island No. 5 is entitled to that proportion of value which the fall in front of Island No. 5 bears to the total fall.

2. It is not a proper rule of law to segregate Island No. 5 as a distinct parcel and determine the water power appurtenant to it as valueless.

3. Island No. 5, by reason of its location, has a natural value for lock and canal purposes, and has a special desirability for either or both of such purposes.

4. Island No. 5 has a strategic value of a substantial character, one capable of pecuniary measurement, and on which account compensation should and must be paid for such element of value.

5. The United States is not entitled, simply by virtue of the ownership of the intervening land between the Chandler-Dunbar properties and those of the St. Marys Company, namely, Island No. 5, to act arbitrarily in refusing to join in a development of the falls as a unit.

6. No findings of law are intended to be made by the court which are intended to affect or define the rights of the Chandler-Dunbar Water Power Company and of the Michigan-Lake Superior Power Company, either as respects past, present, or future contentions between the parties.

(Sd.) L. M. BUTZEL.

151 (Endorsed:) U. S. Circuit Court, W. D. Mich., N. D. Equity. In re petition to condemn all lands, etc., at Sault St. Marie. All requests for findings of law. Filed Dec. 27, 1911. Chas. L. Fitch, clerk.

152 *Findings of fact.*

153 In the Circuit Court of the United States for the Western District of Michigan, Northern Division.

UNITED STATES, PETITIONER,
vs.
CHANDLER-DUNBAR WATER POWER COMPANY, EDISON SAULT Electric Company, International Bridge Company, Michigan-Lake Superior Power Company, and St. Marys Falls Power Company and the city of Sault Ste. Marie, respondents.

In the above entitled matter, the petitioner and the various ones of the respondents having separately requested the making of findings of fact, and the court having determined to make such findings, and having duly considered written requests for specific findings of fact, which requests were duly filed herein, separately, by counsel for the United States and counsel for the Chandler-Dunbar Company and for the St. Marys Power Company and for the city of Sault Ste. Marie, the court does hereby make its finding of facts as follows:

I.

The stretch of water called St. Marys Falls or St. Marys Rapids is about 3,000 feet long, and was, in its natural state, from bank to bank, 4,500 feet wide. In passing this space, the waters from Lake Superior fall some 18 feet, and are the potential basis of a very large water power. There are islands upon the Canadian side, and the international boundary line, midway between the main banks, is near the main channel shore of these islands, whereby it results that, if there were no artificial obstructions, substantially two-thirds of the flow of water would be upon the American side of the line.

These waters have always constituted a recognized part of
154 the navigable waters of the Great Lakes system. The Indian, French, and Colonial commerce, in furs and Indian supplies, passed over the rapids in canoes and bateaux. In the up-land traffic the greater part of the materials was disembarked and carried around the rapids over a short portage, while the canoes themselves, with their loads down-bound, and light up-bound, passed over the rapids. In addition to canoes and barges, small schooners as large as 75 tons were occasionally floated down the rapids, instances being recorded as early as 1775 and as late as 1846, and Mackinaw boats of 50 feet were taken up.

II.

As commerce increased, its necessities were met by a tramway supplanting the old portage, and the cargoes of both up and down

boats were transshipped and carried along this tramway of about a mile.

Later, canals were built reaching from above the rapids to below the rapids, and lift locks were placed in such canals, both on the Canadian side and on the American side of the falls.

As commerce increased, the canals were increased in size and efficiency and larger locks built until the present time.

III.

Between the north line of the canal grant on the American side and the shore of the upper rapids, there remained a block of land some 2,500 feet long and varying throughout most of its length from 150 to 250 feet in width.

This intervening strip, according to the Whelpley plat, contained a village lot (3); parts of private claims 3, 4, 95, and 96; part of a former Indian reservation; and part of Portage Street.

The fall in the river, the water power of which is the subject of the main contention herein, was in the rapids fronting on the upper part of the so-called Indian reservation.

IV.

All this property (excepting an undivided half of a part of village lot 3 and a part of private claim No. 3 and excepting Portage Street) was owned at the time of the taking herein by the
155 Chandler-Dunbar Water Company, excepting only a strip thereof of the width of about 100 feet lying next north of the north side of the canal grant, which was, in January, 1908, conveyed by the said company to the United States.

The other undivided half of part of village lot 3 and part of private claim No. 3 was owned by Sault Ste. Marie Bridge Company, operating an international railroad bridge across the River St. Mary.

V.

The part of the so-called Indian reservation involved herein was entered by Wm. Chandler by use of Porterfield scrip, on application made in 1880, resulting in issue of patent in 1883.

The cost to the patentee of this parcel, containing about nine acres, was inconsiderable, except for the large expense of contest and appeal on application to enter.

Title to this property came to the Chandler-Dunbar Water Power Company from Mr. Chandler.

VI.

The United States made claim that the patent to the Indian reservation did not operate to convey two islands, numbered 1 and 2, in the bed of the stream, and that the patent was invalid for the

reason that the land therein described was, in fact, not subject to entry because it was an Indian reservation and because the same land had not been properly surveyed. The United States filed its bill to establish its title to said islands, and the Supreme Court of the United States, finally, in 1908, held that the statute of limitations had run against any indirect attack upon the validity of the patent and that the patent carried title to the islands.

VII.

In 1907 (there being two locks on the American side) it was decided to construct a third parallel lock. For this and for canal widening, then and before then determined on, more land became necessary, and after long negotiations the Chandler-Dunbar Water Power Company quitclaimed to the United States, in January, 1908, the strip of land 2,500 feet long and averaging 100 feet wide along the upper side of the canal lands before referred to, thus correspondingly lessening the width of the strip remaining to private ownership. This quitclaim was for a nominal money consideration, but in connection with substantial benefits hereinafter mentioned.

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A fourth lock was then, and now is, in indefinite contemplation.

VIII.

In March, 1909, Congress, by act approved March 3, 1909, enacted that the United States would take not merely the land presently necessary for the third lock, but all the privately owned property between the northerly existing canal strip line and the international boundary line.

The Secretary of War filed with the register of deeds of Chippewa County, Michigan, wherein said premises lie, on December 20, 1909, the necessary instrument declaring the taking and proceeded with construction work. This action is to fix "just compensation" to be paid to the property owners for the property so taken. Preliminary thereto the United States offered, and the Chandler-Dunbar Water Power Company refused, $375,000.00 for its property and that of the Edison Sault Company herein involved; and a similar offer of $10,000.00 was made and refused for Island No. 5 hereinafter described.

IX.

No question exists as to the necessity for taking the dry land. It will all be directly required for the proposed locks, canal, and forebay, and use for these purposes is use for navigation. As to the submerged lands out to the boundary the matter is not so clear. A large part is clearly not directly necessary at present for the needs of navigation; but such part is so connected with and incidental to the other directly and presently necessary portion as to be affected

by and brought within the same pervading necessity and as to make it proper for Congress to take the whole.

As to all the property described, a necessity for taking for
157 public use exists, as matter of fact.

The necessity for taking all, as applied to the facts here, is a necessity of peculiar character. It may be called a constructive, as distinguished from an actual, necessity. As to the excess beyond a certain amount of land and water, the taking is secondary and incidental to the taking of the primary body now needed.

X.

If no water was to be used beyond 4,000 c. s. f. (that is, a flow of 4,000 cubic feet per second), and no land was to be occupied beyond the amount necessary for locks and appurtenant structures to use that amount of water according to present methods, the remaining water could be made to flow over the remaining land and to develop thereon its full power.

XI.

The amount of water flowing out of Lake Superior depends, primarily, upon the height of the lake, and this has fluctuated over a margin of about three feet during the past 50 years. During the 47-year period ending 1907 the average flow was about 80,000 c. s. f., for the 25-year period ending with 1909, about 75,000 c. s. f. For the years 1907–8–9 the average flow was slightly above 64,000 c. s. f., and this is the proper measure for this case.

The general well-known alarm about lowering lake levels, and fear of still lower, would, in the mind of an intending purchaser and his advising engineers, counterbalance the theoretical possibility of rising levels.

XII.

Between the upper and lower lines of the Chandler-Dunbar property, extended at right angles to the thread of the stream, the fall is substantially 10 feet, with an effective head of 9 feet; and every 100 c. s. f. of flow equals 100 theoretical horsepower (on the wheel) or 70 electrical horsepower (on the switchboard).

XIII.

Two-thirds of the above total flow would, under original,
158 natural conditions, flow over the Chandler-Dunbar Water Power Company's submerged lands.

XIV.

There is a present, established demand for a comparatively small amount of the raw (unimproved) power. The natural increase from the ordinary growth of the community will not more than counter-

balance the loss when the Government construction work ceases. Any further demand must be created by the promotion of power-consuming concerns. The plan for promoting or securing a wood-pulp mill which would consume all the available power, storing, if necessary, its surplus product during the high water, is feasible, and is reasonable probable of execution. Such probability is sufficiently definite and certain to justify the conclusion that all the power has a definite value, instead of the conclusion that most of it is too speculative for computation; and I adopt the former conclusion as the fact. I fix the annual value of the raw power, per theoretical horsepower, as follows: For the first 3,000 h. p., $10 each; for the second 3,000 h. p., $7.50 each; for all beyond 6,000 h. p., $5 each. The cost of development, so far made, should be added. These values are on the basis of a perfect and unincumbered right to the water.

XV.

The proper basis for capitalization is ten per cent.

XVI.

The amount of commerce passing the rapids is beyond comparison with any other analogous waterway in the world. Indeed, perhaps, there is no analogous waterway. A high estimate of the value of the entire flow of the river for power would not exceed two million dallars per year, while the value of the river to the public, as a commercial waterway, is, doubtless, fifty times that amount. In the ordinary power stream the element of navigation is dormant and insignificant; here it is active and overwhelming, and it is the power element which is comparatively insignificant.

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XVII.

The increase in navigation has been on geometrical ratio. The dream of one decade has been the reality of the next. One lock, planned for all future needs, has become inadequate before it was finished. We can fix what seem to be the maximum future limitations for this commerce; but such estimates may be as inaccurate as were those made 25 years ago.

XVIII.

If the upland in controversy had been taken for enlargement of canal and locks, the riparian would have had no remaining upland to use in connection with the power development.

Such development wholly upon the submerged land would have carried unusual suspense and contingencies.

XIX.

Additional locks, canals, forebays, etc. (beyond the third lock), can be built to advantage only upon the submerged land. Congress

might think best to provide a large number of locks so that the great blockades which occasionally occur could be cleared away in a few hours, although most of the locks would be idle most of the time. It is conceivable, though improbable, to suppose that structures of this class will eventually occupy all the space not needed to pass floatable products. Then the surplus water must be diverted elsewhere. So, too, it is conceivable that Congress might construct works further down stream, flowing this space with slack water and getting all the fall at a lower point.

XX.

The present use of the water in direct aid of navigation, is only for filling and operating locks and for floating a few logs. The best expert judgment, both of the Waterways Commission and of the witnesses in this case, is that 4,000 c. s. f. is the maximum amount which will ever be needed for these purposes; and, therefore, the amount to be needed for navigation, so far as the same can now be definitely determined, must be fixed at this figure, leaving the balance beyond need for navigation. I think, however, that owing
160 to all the contingencies involved, it is impossible to fix this amount with sufficient certainty to make any definite finding of fact relating thereto, except as in this and in other paragraphs stated.

XXI.

Other methods of using the water in direct aid of navigation may be found, requiring more or all of the water. For example, smoothing out the bed could be made to give an even flow five feet deep, and up a part of such channel light-draft vessels could be hauled by the power generated from the water in the remainder of the channel. For further example, the whole power might be employed to operate a ship railway, transporting vessels around the rapids; or a floatable product may develop, requiring much of the width of the channel in order properly to be floated down. All of these examples are highly improbable—probably fantastic, but not more so than the present volume of this commerce or the present methods of transmitting this power would have been a few years ago.

XXII.

The practice of the United States and of the riparians heretofore has been to grant and to obtain a permit to construct any works upon the submerged lands in the bed of the river and these permits have been revocable in form, and those heretofore given have been formally revoked.

XXIII.

The contemplated method of developing the whole power is by dam across the American part of the river and a dike up along the

international boundary, and it might be well within the limits of proper discretion for the Government not to permit such a structure.

No reason has been shown, and I see none, why it would not be feasible for such a dam, under private ownership and management, to be fully subject to governmental control and regulation in all matters affecting navigation; such *such* divided control might cause complications. There is no clear authority therefor, and, in the absence of further legislation, the engineering officers might
161 find room, within the limits of sound discretion and good faith, to refuse such a permit.

XXIV.

From natural causes the lake levels fluctuate over periods of years and even from year to year. Artificial causes, like the Chicago Drainage Canal, contribute. Every additional foot of water that can be had is of immense value. It may be desirable to hold back the waters of Lake Superior to maintain or raise the level there, or it may be best to increase the discharge artificially for the benefit of the lower lakes. Both of these things have been done.

During part of every year, during recent years, the United States engineers have wholly stopped the flow of water through the Michigan-Lake Superior power canal, thus greatly lessening its value as a power producer.

XXV.

It is for the interest of a power plant in the rapids that the river flow shall be constant and that the fluctuations should be in Lake Superior. It is for the interest of navigation in that lake that its level shall be constant and that the fluctuation shall be in the river flow.

XXVI.

There are enthusiastic advocates of a plan for a series of dams in Niagara, Detroit, St. Clair, and St. Marys Rivers, giving slack-water navigation for vessels of 25 feet draft from Duluth to Buffalo. The execution of such a plan might, and probably would, obliterate this water power at this point and transfer it down the river.

XXVII.

However unlikely this last-named plan may be, it is agreed by all that controlling works, consisting of some kind of a dam across the entire St. Marys River, built and operated through some joint arrangement with Canada, and by which the level of Lake Superior and its outflow could be regulated, would be an extremely desirable thing for both countries, and of great value to the commerce of the upper and lower lakes.

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XXVIII.

Such a structure I regard as within the fair limits of possibility in the not very distant future. Its erection, if at some other point, would incidentally destroy the power inchoate at this point, and if the erection was at this point there would be a physical occupation of a greater part or all of the Chandler-Dunbar submerged lands, and the water power produced would be in the nature of an incidental by-product of the main navigation use.

XXIX.

The Chandler-Dunbar lands, upland and submerged, are set off by the existing canal and locks. A bridge across these, to give free access, would be very burdensome to navigation. Ordinary foot traffic can continue upon the lock gates as it does. The railroad affords access to the upland for heavy traffic, and the maintenance of a side track into this property was one of the things expected and arranged for when the quit-claim deed of January, 1908, was given. Claims 95 and 96 give full access to deep-water navigation on Lake Superior. Transmission wires for electricity could cross the canal, as is now done, by conduit under the same without any prejudice or injury to the public use of the canal.

XXX.

The plan for improvement proposed by the Chandler-Dunbar Water Power Company, and the only practicable plan which the record indicates, is the building of a dam at approximately right angles with the stream along the lower boundary of the Chandler-Dunbar submerged lands out to the thread of the stream, and then the extension of this dam as a wing dam or dike upstream along the international boundary line. Theoretically, this would impound upon the American side of the dike and pass over the dam the same water which would naturally flow over the same submerged land.

XXXI.

Obviously, the erection of such a structure would, practically,
affect the amount of water flowing on the Canadian side of the
163 dividing wall. If, according to one suggestion, the crest of
the natural rock dam at the head of the rapids on the American side of this dike should be scalped down a few feet in order to avoid friction and get better conditions on the wheels, the tendency would be to divert water from the Canadian to the American side.

So, without such scalping, unless the wheels were so regulated as always to carry away exactly the proper amount, the tendency would be either to pull water into the American channel or to retard the flow on that side and flow the other side. These probable and possible

effects might or might not be equalized by the erection of compensating works in the rapids, or by using the Michigan-Lake Superior power canal for compensating purposes; but these things would be beyond the control of the Chandler-Dunbar Company.

XXXII.

The converse situation from that suggested in the preceding paragraph may exist. So far as we are informed by this record, the Canadian Government, as sovereign or as a proprietor, might see fit to remove the crest of the rock dam on its side of the dividing wall or widen and deepen the existing Canadian power canal, and thereby divert to the Canadian side a great part or even all of the water, leaving the Chandler-Dunbar submerged land no longer submerged.

XXXIII.

The proposed structure, especially in connection with the proposed manufacturing plant built upon piers and covering a great part or all of the submerged land, would be an obstruction to the ice which comes down in the spring in enormous quantities, and would tend to cause an ice jam or blockade, which might send the river over its banks, both in the United States and Canada, and might, for example, destroy the locks.

XXXIV.

For about 20 years the Chandler-Dunbar Company, or its predecessors or someone claiming under it, has been developing power at this part of the rapids. This was accomplished by a short transverse dam near the lower boundary of its land extending out a short
164 distance into the stream and then extending up along the bed of the stream (substantially) parallel to the bank up to the head of the rapids. This dam or wall toward its upper end diverged out into the stream the better to divert water into the headrace and into the fore bay formed by its lower part. Earlier structures of this character were replaced about 1901 by those more extensive ones which existed when this condemnation was made. While considerable in extent and cost, they are inconsiderable as compared with the structures now proposed to utilize the whole power, and they were, comparatively speaking, along the bank rather than across the stream. Development of power thereby would be subject to some of the special objections and difficulties which have been noted, but to many and perhaps the majority of such objections it would not be subject, or, if subject thereto, would be so in a degree very much less than the proposed plan for the entire development. From year to year these developers have added to their investment relating to and depending thereon until such investment, at the time of this taking, amounted to approximately $500,000. The public lighting of the

city of Sault Ste. Marie and the maintenance of various industries there were dependent on the power so developed. The United States itself, or contractors working on its public works, has for some years taken electric power from this source and paid therefor to these private parties.

XXXV.

About 1902 the Michigan-Lake Superior Power Company completed a canal from the waters above the rapids to slack water below the rapids. This canal was designed to carry 32,000 c. s. f. As construed, it was capable of carrying that amount or more or less, according to the fall permitted before reaching the power house. It has actually been carrying about 10,000 c. s. f. excepting when this flow has been temporarily diminished or stopped by the United States engineers when the Lake Superior level reached the determined minimum. Allied interests constructed upon the Canadian side of the river compensating works, originally supposed to divert from the Canadian to the American side as much water as was to be
165 taken by this Michigan-Lake Superior Power Company canal, but whether such compensating works had such effect is in dispute and is not shown by this record. Both Governments have, however, now for a long period of years permitted 10,000 c. s. f. to be used for developing power through this channel, and it is the plan and expectation of the present officials of the War Department and the present engineering officers in charge of these works to permit 10,000 c. s. f. or more of water to pass through this power canal under average conditions, and to receive payment therefor by way of a license or rental as contemplated by the act of March, 1909, with reference to surplus water.

XXXVI.

The plans and specifications approved by the War Department and the engineers, forming part of this general project and now in process of execution, provide for dams, cross and longitudinal, similar to those now in existence, but further out into the bed of the stream. By this structure it is the plan and expectation of such department and of such officials to develop water power for sale, pursuant to the provision of this act regarding surplus water.

XXXVII.

The existing structures built by or under the Chandler-Dunbar Company are in connection with a tail race excavated upon the below-lying public river bed, whereby there is, at the power house, a fall of 15 feet instead of only the 9-foot fall (effective) which exists on the Chandler-Dunbar property. The existing dam provided for and contemplated setting 9 wheels, each capable of developing under the 15-foot head, 500 horsepower, making a total planned and partly

executed development of 4,500 horsepower (electrical, equalling 6,500 theoretical). At the time of condemnation four such wheels had been set and were in use. Suitable wheels in the same location and under a 9-foot head would develop 225 horsepower (electrical) each.

The outer dike of the existing head race extended to the second span of the bridge, and was capable of diverting into the head
166 race, out of the supposed 60,000 c. s. f., substantially 6,500 c. s. f. The capacity of the four installed wheels, under the existing condition of fall and tail race, has been about 2,000 c. s. f., and the amount of water actually diverted through the Chandler-Dunbar head race and works has for some time approximated, but has not exceeded, 2,000 c. s. f.

XXXVIII.

The proposed United States structures in the bed of the stream will deliver 7,500 c. s. f. (at stage 601.5) and will produce 12,700 horsepower under a 15-foot head, or 7,600 horsepower under a 9-foot effective head (both theoretical).

XXXIX.

The permitted and contemplated diversion through the Michigan-Lake Superior power canal was, right or wrong, at first supposed not to diminish the flow of water through the rapids on the American side, and the amount of this diversion has been under continuous governmental control, and has frequently been stopped entirely for considerable periods.

XL.

The amount seized or impounded by the Chandler-Dunbar Company's existing development is and will be surplus water not needed directly or indirectly for navigation, save by that species of constructive need with reference to which the facts have hereinbefore been found.

XLI.

The amount of water sufficient to develop 6,500 horsepower (4,500 electrical) on the property of the Chandler-Dunbar Company; that is, on a 9-foot effective fall is the proper figure to be taken in this connection. True, so much water in cubic second feet has not yet been passed through the head race, and could not be, in its present form. Some enlargement of the head opening would be necessary, but the improvements were planned for this 6,500 horsepower, an investment was made and a business built up on such plan; the tail race which would allow this power to be developed with the greater head and the smaller amount of water, was permitted, and the
167 acquiescence of the Government agents and the public was in

a plan which contemplated and called for so much water as might be necessary to develop 6,500 horsepower; and I think it was included in such plan that such development would be wholly upon the Chandler-Dunbar property, if the tail race privilege should not be continued. This, then, justifies and calls for a finding which is, in form, a finding of fact, but which, as I view it, is only a question of drawing the proper legal inference from the various facts found, and, accordingly, I do find that water sufficient to develop 6,500 horsepower (theoretical) on the property of the Chandler-Dunbar Company is surplus water for which compensation should be assessed in this proceeding.

XLII.

Such 6,500 horsepower has an annual value of $55,000; a present value of $550,000.

XLIII.

The upland along the rapids, comprising the Chandler entry, a part of Portage Street, and part of private-land claim No. 3, has an independent value. It is preeminently fitted for a manufacturing site in connection with the water power to be developed. It also has value in connection with the probability that it would be needed for lock and canal or bridge purposes. The value of this parcel is subject to many contingencies, but I fix the same as follows (including railroad side track, buildings, and cable tunnel): For uses wholly disconnected with water-power development or public improvement, that is to say, for all general purposes, like residences or hotels, factory sites disconnected with this water power, etc., $20,000. This as the base value. For a factory site in connection with the proposed development of the entire water power, so as to use thereon or in connection therewith 30,000 horsepower or more, an additional value of $80,000, or a total of $100,000. For use as factory site in connection with the development of 6,500 horsepower, either as a single site or for several smaller factories to use the surplus of 6,500 horsepower not now used in the city, an additional value of $20,000, or a total of $40,000. The fact that it was desirable for use for lock and canal or bridge purposes gives it an additional value element in each case of $25,000. The total value of this parcel for this proceeding should therefore be taken as $65,000.

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XLIV.

The Portage Street sub-parcel is seven per cent in area of the whole parcel referred to in Paragraph XLIII, and is entitled to seven per cent of the values found in that paragraph. The fall appurtenant to this Portage Street parcel is two-tenths of a foot, and is so insignificant as to be negligible.

XLV.

Claims 95 and 96 front upon deep water above the head of the rapids. They have been used for wharfage for many years, and the wharf structures and the filling now located thereon and extending therefrom have cost, approximately, $12,000. On the submerged land appurtenant to them (or to the parts sold January 22nd, 1908, by the deed reserving all riparian rights), spoil from the lock work has been and is being dumped. It was part of the consideration for this quitclaim of 1908 by the Chandler-Dunbar Company that this fill and dump should be made by the United States, and the complete carrying out of this plan in good faith as then contemplated would have given a large frontage and a considerable area along the upper river supported by these two private claims. I fix the value of these two claims and the dump and fill, made or which should have been made all as one parcel, as follows: For general wharfage, dock, and warehouse purposes, disconnected with the development of power in the rapids and not in association with the land along the rapids (and as the base value), $10,000. By reason of its desirability for lock and canal purposes, an additional $10,000. In connection with the land along the rapids, if used as a part of the development of the 6,500 horsepower, an additional value of $5,000, or a total of $25,000. To be used in association with the land along the rapids for the development of the entire 30,000 or more horsepower, a still additional value of $25,000, or a total of $50,000.

169 For the reasons stated, the owners are entitled to the general purpose or base value plus the canal and lock value element plus the 6,500 horsepower value element, making a total value of $25,000.

XLVI.

The value of the existing dike, now used as the outside wall of the headrace to bring the water to the mill site in the existing development, is $16,524.

XLVII.

Over practically the whole rapids the thread of the stream or "thalweg" and the international boundary line are substantially coincident.

XLVIII.

Litigation has been long pending and is still pending between the Chandler-Dunbar Company and the Michigan-Lake Superior Company. The former claims that whatever water goes through the power canal is unlawfully diverted from flowing over the Chandler-Dunbar subaqueous lands and that this water must be restored in its natural channel; the latter disputes this claim for various reasons, and among others upon the ground of an alleged personal estoppel

against the Chandler-Dunbar Company. Whatever water has gone and is going through the Michigan-Lake Superior power canal has been and is from the surplus above that necessary to produce the 6,500 t. h. p., and as to which surplus no compensation is awarded in this proceeding.

XLIX.

The city of Sault Ste. Marie grew up on United States' public land. Streets were laid out and lots and parcels enclosed and occupied without express authority. In 1850 Congress directed (9 U. S. S. L., 469) a survey and a plat to be made, and, accordingly, the Land Office made the Whelpley survey (approved September 4, 1855, by the Surveyor General). This indicated the streets, the private claims, the vacant lots, the Indian reservation, and the then (1855) existing canal grant. Apparently upon the supposi-
170 tion that Portage Street had been a de facto street extending to the river before the canal property was granted and the canal built, this survey shows Portage Street continuing from the north bank of the canal to the south bank of the river, although such portion of the street was, upon the face of the map, inaccessible from the remainder of the street. Later, in 1879, pursuant to this survey, patent was granted to lot 3, described simply as "lot 3." Still later, when the Chandler patent was granted, the land conveyed was described as bounded on the south by Portage Street, and particularly by a line which was, in fact, the northeast line of Portage Street.

L.

The city never in any manner did anything indicating an acceptance of that portion of the street north of the canal, although on the south of the canal it improved and occupied the street in the usual manner. The part north of the canal has always remained wholly vacant and unoccupied, save for the occupation by the Chandler-Dunbar Company, hereafter mentioned. There never has been any acceptance by the city of this dedication.

LI.

About 1887 a small building was erected under the Chandler-Dunbar Company upon that part marked on the map as Portage Street. It was occupied by the Chandler-Dunbar Company's tenants until it burned, about 1907. There has been no specific enclosure of this street parcel along with the Chandler-Dunbar property on either side or by itself. There has been no open, hostile, or adverse possession of this street parcel by the Chandler-Dunbar Company, except as in this paragraph stated.

LII.

On application of William B. Cady to enter with Porterfield scrip that parcel of land north of the canal grant included within

the lines of Portage Street so-called, the Commissioner of the General Land Office decided that the fee title to such land had passed from the United States to the owners of the adjacent parcels, as more fully appears by the commissioner's published decision.

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LIII.

Pending this proceeding the International Bridge Company, treated by the petition herein as the owner of the parcel described in paragraph 4a of the petition, has conveyed to the United States its title therein. The description found in paragraph 4a includes a parcel the acreage of which is .032 of an acre and the value of which is $676. Of this included subparcel the Chandler-Dunbar Company is the owner of an undivided one-half.

LIV.

The respondent, the Edison Sault Electric Company, at the time of taking by the Secretary of War of its leasehold interest, had a lease to it, its successors and assigns, from the respondent Chandler-Dunbar Water Power Company for and during the term of 80 years, commencing on the first day of November, 1891, and terminating on the first day of November, 1971, of a piece of land of the said Chandler-Dunbar Water Power Company property, and situated in the city of Sault Ste. Marie, Michigan, bounded as follows: Beginning at a point on the east boundary of the said property distant northerly four hundred (400) feet from the southeast corner of the said property; thence continuing northerly along said east boundary three hundred (300) feet; thence westerly at right angles to the said east boundary two hundred (200) feet; thence southerly parallel to the said east boundary three hundred (300) feet; thence easterly two hundred (200) feet to the place of beginning.

That of the property so as aforesaid taken the said Edison Sault Electric Company, at the time of said taking, was the owner of certain constructions, viz, a power house and equipment with forebay and tailrace appurtenant thereto, and certain railroad siding located on land controlled by said Edison Sault Electric Company, and rights in a tunnel and cables under the United States' canal with the extension thereof under the new canal being constructed, and the wires and cables and conduits and supports joined thereto and

172 serving to convey the electric output of the power plant over and under the United States' canal to the south boundary thereof, and also a complete distributing system located on Government property and on Chandler-Dunbar Water Power Company property, also five frame warehouses located on Chandler-Dunbar Water Power Company property.

The respondent, Edison Sault Electric Company, at the time of said taking also owned and operated, in conjunction with its power house, a complete light and power distribution system, to wit, cables,

wires, poles, transformers, lamps, meters, a substation site and buildings and appurtenances required for a complete service of electric light and power to the city of Sault Ste. Marie and the inhabitants thereof, which said distributing plant and system lying south of the St. Marys Falls Canal was diminished in value by the taking of the leasehold interest, power house, and other property of said company lying north of said canal.

LV.

Pending this suit the Secretary of War and the Edison Sault Electric Company have entered into a contract of lease whereby the company will receive from the United States electric current for the prosecution of the business of the company. The execution of this contract diminishes the loss in value which would otherwise result from the taking to the property of the Edison Sault Electric Company south of the canal.

LVI.

The value of all the interests of the Edison Sault Electric Company in and appurtenant to the property described in the petition and taken by the United States is $300,000.

LVII.

The deed of January, 1908, of Chandler-Dunbar Water Power Company to United States conveyed land valuable for canal and lock purposes. It is now in use for such purposes by the United States and covers six and fifty-two hundredths (6.52) acres. Said deed contained the following reservation and exception:

"The above described tract or tracts of land conveyed by this instrument being indicated by the shaded portion appearing
173 upon the plat thereof hereto attached and hereby made a part of this deed and description, expressly excepting and reserving, however, from this deed and description all riparian rights now vested in said first party by virtue of the ownership of said land and which might, except for this reservation, pass to said second party by this conveyance, it being the definite intent and purpose of this exception and reservation to limit all rights hereby conveyed to within the boundary line given, to exclude from said conveyance the watercourse of the St. Mary's River outside the limits of the tract conveyed, and to reserve absolutely to said first party all riparian rights in the same full use and enjoyment as though this deed had not been given."

LVIII.

The shore line of the said lands of which the Chandler-Dunbar Water Power Company was, at the time of the taking thereof and except for which taking, now is, the owner in fee simple of the

entire estate, is over 3,000 feet in extent. And the shore line of the lands of which the Chandler-Dunbar Water Power Company was, at the time of the taking thereof, and except for such taking, now is, the owner of the undivided half, is over 250 feet in extent. The continuity of the frontage is broken by the Portage Street parcel.

LIX.

The plans and specifications referred to in findings 36 and 38 contemplate a cross dam, including the present cross dam of the Edison Sault Electric Company, and extending about 200 feet further into the stream, substantially at right angles with the flow, and a wing dam extending upstream therefrom about 2,000 feet, and the upper end of which will be in the stream about 1,000 feet from the shore. The contract had been made for the construction of such work, and such construction was progressing at the time of the trial. All the different plans which have been proposed for development, viz, (a) the first improvement by the Chandler-Dunbar Company, (b) that of the Edison Sault Electric Company adopted and executed about 1901, (c) that of the American Sault Paper Company projected in 1902, but not executed, (d) that of the United States now being executed, and (e) the plan presented by the Chandler-Dunbar Company herein as its basis for computing values, are substantially of the same character and show the adoption of substantially the same method.

174

LX.

The plan proposed by the Chandler-Dunbar Company for development, as the basis of its claim of value in this case, contemplated and provided for the passage of ice through the development works. Such provision was sufficient for ordinary conditions.

LXI.

The cross dam, built in 1901, and used by the Edison Sault Company, extended into the river a distance of about 400 feet beyond the meander line.

LXII.

(a) The largest volume of freight which has passed through the American and Canadian canals in any one year was 62,000,000 tons in the year 1910.

(b) The largest volume of freight now anticipated as proper to be provided for is 200,000,000 tons per year.

(c) The volume of flow of 4,000 c. s. f. would provide for the passage of 1,000,000,000 tons of freight per annum, according to present methods, and for all forest products now passing.

LXIII.

If controlling works were constructed across the channel and were so used as to equalize, as far as possible, the outflow of Lake Superior, they would increase the amount of flow in the low-water period, and so increase the amount of power then to be derived therefrom; but they would decrease the amount of flow at the high-water period and diminish the amount of power which could then be produced. If such works were used to maintain the level of Lake Superior as perfectly as possible, they would tend to diminish the power to be derived at low-water periods.

LXIV.

The land of the Chandler-Dunbar Company herein taken, upland and submerged, forms and most available site for such controlling works, and the most available site for another international bridge anywhere between Lakes Superior and Huron.

175 LXV.

The compensating works referred to in finding 35 consist of a dam at the head of the rapids extending out from the Canadian side substantially to the international boundary line, and provided with gates so as to permit the passage of more or less water through the dam or over the same as desired.

LXVI.

Island No. 5 is situated in the American edge of the rapids, below the Chandler-Dunbar property and opposite that part of the shore already belonging to the United States.

It contains about one-third of an acre in area. Its length, up and down the stream, is 175 feet, and the amount of fall between the upper and the lower boundary lines, extended to the thread of the stream, is two feet. In appurtenant, submerged land is a shoal which prevents the development of a 15-foot head upon the upstream site most suitably available therefor, but which would not interfere with the development of a 9½ effective head at the lower edge of the Chandler-Dunbar property. The United States owns the bed of the stream to the thread intervening between the Chandler-Dunbar Co. property and Island No. 5.

LXVII.

Additional excavation upon the submerged land appurtenant to Island No. 5, would permit the entire river front property and the water power to be developed as a unit, and the entire property, as a unit for such development, would be worth $50,000 more than

if the rights appurtenant to Island No. 5 were not included in such unit. This finding refers to the use of the 6,500 c. s. f. elsewhere considered as entitling the Chandler-Dunbar Company to compensation therefor.

LXVIII.

An ejectment suit is pending, brought by the United States and defended by the St. Mary's Falls Power Company, in which suit the United States claims, and for many years has claimed, to be the owner in fee of Island No. 5, and unless such claim is
176 right, the St. Mary's Power Co. is owner in fee thereof.

LXIX.

Nothing has ever been done by anyone looking to the development of power, directly or indirectly, opposite Island No. 5. No power could be commercially developed out of the two-foot fall appurtenant to the island, if such fall is not united with any other.

LXX.

The value of Island No. 5 is as follows:

(a) As a base value for general purposes, as for a cottage or a fishing station, $1,000.

(b) As a strategic value, growing out of the extent to which it may control or block the most available development by upstream owners, $15,000.

(c) As an additional value by reason of its special suitability for lock or canal purposes, $5,000.

(d) If it should be held that the riparian owners are entitled to compensation for water power above the 4,000 c. s. f. estimate, and above the 6,500 c. s. f. allowance, then the value of such excess water-power appurtenant to Island No. 5 is ten per cent of that to be fixed for the similar rights of the Chandler-Dunbar Company.

LXXI.

All the development works ever constructed upon the Chandler-Dunbar submerged lands by anyone, have been constructed after obtaining from the Secretary of War a permit therefor, and each such permit has been expressly revocable by right of revocation reserved on its face, to be exercised with or without cause. Each such permit was revoked before the commencement of this proceeding.

LXXII.

On January 1st, 1910, the United States took, and has since maintained, exclusive possession over the property involved, excepting the intangible water-power rights, and has since that date deprived

the former owners of all beneficial use. As to the water-power rights, the only existing use beneficial to the owner consisted of the rentals accruing under the lease from the Edison Sault Company.
177 Of these, the United States has never, up to this time, taken possession, but the rentals have continued during this proceeding and are continuing to be paid or to accrue to the Chandler-Dunbar Company. By the arrangement made, pending this proceeding, between the Edison Sault Company and the representatives of the United States, a lease of the rent-producing water power is to be made by the United States to the Edison Sault Company, and the United States is to become the landlord and only upon the completion of this proceeding by payment into court of the awards made to the Chandler-Dunbar Company and the Edison Sault Company, and until that time, the Chandler-Dunbar Company is to continue to receive the rentals accruing under the previously existing lease.

Dec. 28, 1911.

ARTHUR C. DENISON, *Circuit Judge.*

(Endorsed:) The Circuit Court of the United States for the Western District of Michigan, Northern Division. In re condemnation of lands for "Soo" Canal. Findings of fact. Filed Dec. 28, 1911. Chas. L. Fitch, clerk.

178 *Motion to limit power values.*

179 In the Circuit Court of the United States for the Western District of Michigan, Northern Division.

UNITED STATES, PETITIONER, *vs.* CHANDLER-DUNBAR WATER POWER COMPANY, EDISON Sault Electric Company, International Bridge Company, Michigan-Lake Superior Power Company, and St. Marys Falls Power Company, and the City of Sault Ste. Marie, respondents.	No. 638.

MOTION.

Now comes the United States of America, petitioner, by Fred C. Wetmore, R. T. Strickland, William K. Clute, and Grant Fellows, its attorneys, and move the court now here that the judgment and award herein in favor of the Chandler-Dunbar Water Power Company be limited to the sum of forty-five thousand four hundred sixty-two ($45,462.00) dollars, eliminating and disallowing from said judgment and award the sum of five hundred fifty thousand ($550,000.00) dollars for the raw water power; the sum of eighteen thousand six hundred ($18,600) dollars, (being 93% of the additional value
180 given the upland "for use as factory site in connection with the development of 6,500 horsepower either as a single site or for

several smaller factories to use the surplus of 6,500 horsepower not now used in the city"); also eliminating the sum of five thousand ($5,000.00) dollars, allowance for private claims 95 and 96, value given, "in connection with the land along the rapids if used as a part of the development of 6,500 horsepower" notwithstanding such part of finding of fact number fourteen (14) as reads as follows: "I fix the annual value of the raw power per theoretical horsepower as follows: For the first 3,000 h. p. $10.00 each; for the second 3,000 h. p. $7.50 each; for all beyond 6,000 h. p. $5.00 each."

Notwithstanding so much of finding of fact No. twenty-nine (29) as reads as follows: "Transmission wires for electricity could cross the canal as is now done by conduit under the same without any prejudice or injury to the public use of the canal."

Notwithstanding such part of finding of fact number forty-one (41) as reads as follows: "This, then, justifies and calls for a finding which is in form a finding of fact, but which, as I view it, is only a question of drawing the proper legal inference from the various facts found, and accordingly I do find that water sufficient to develop 6,500 h. p. (theoretical) on the property of the Chandler-Dunbar Company is surplus water for which compensation should be assessed in this proceeding."

And notwithstanding the finding of fact number forty-two (42) which reads as follows: "Such 6,500 h. p. has an annual value of $55,000.00; a present value of $550,000.00."

And notwithstanding the finding of fact number forty-three
181 (43) which reads as follows: The upland along the rapids, comprising the Chandler-Dunbar entry, a part of Portage Street, and part of private land claim No. 3, has an independent value. It is preeminently fitted for a manufacturing site in connection with the water power to be developed. It also has value in connection with the probability that it would be needed for lock and canal or bridge purposes. The value of this parcel is subject to many contingencies, but I fix the same as follows: * * * For a factory site in connection with the proposed development of the entire water power so as to use thereon or in connection therewith 30,000 horsepower or more, an additional value of $80,000, or a total of $100,000. For use as factory site in connection with the development of 6,500 horsepower, either as a single site or for several smaller factories to use the surplus of 6,500 horsepower not now used in the city, an additional value of $20,000, or a total of $40,000. The fact that it was desirable for use for lock and canal or bridge purposes gives it an additional value element in each case of $25,000. The total value of this parcel for this proceeding should, therefore, be taken as $65,000."

For the reason that the said lands are surrounded on three sides by Government lands and on the other side by the international boundary and the said Chandler-Dunbar Water Power Company have no way of necessity across Government lands, and therefore

no method of delivering any product manufactured on said lands to market.

FRED C. WETMORE,
R. T. STRICKLAND,
WM. K. CLUTE,
GRANT FELLOWS,
Attorneys for Petitioner.

182 (Endorsed:) In the Circuit Court of the United States for the Western District of Michigan, Northern Division. United States, petitioner, vs. Chandler-Dunbar Water Power Company et al., respondents. Motion to limit award. Filed Dec. 28, 1911. Chas. L. Fitch, clerk. Fred C. Wetmore, R. T. Strickland, William K. Clute, Grant Fellows, attorneys for petitioners.

183 United States District Court Western District of Michigan, Northern Division.

SATURDAY, MAY 4, 1912.

The court met pursuant to adjournment.
Present the honorable Arthur C. Denison, circuit judge, designated.

In the matter of the condemnation of all lands north of the St. Marys Falls Ship Canal to the international boundary.

In the above-entitled cause the United States having made and filed a motion that the judgment and award in favor of the Chandler-Dunbar Water Power Company be limited to the sum of $45,462, and eliminating and disallowing from the judgment hereinafter to be awarded to the said company the sum of $550,000 for the raw power and the sum of $18,600 for use of the land as a factory site and to eliminate $23,250 for lock and canal purposes, and also the further sum of $10,000 for private claims 95 and 96 for lock and canal purposes, and also $5,000 value of said land in connection with land along the rapids, if used as a part of the development of power, notwithstanding the findings of fact recited in said motion, and the said motion having come on to be heard during the progress of the trial, after due consideration thereof, and after hearing the arguments of counsel for the respective parties, it is ordered that the said motion be, and the same is hereby, denied and overruled, and that this order may take effect as of the 27th day of December, 1911, the announcement in open court to the overruling of said motion having been made during the progress of the trial at that time and not having been entered.

Approved for entry this 4th day of May, 1912.

ARTHUR C. DENISON,
Circuit Judge, designated.

184 *Motion way of necessity.*

185 In the Circuit Court of the United States for the Western District of Michigan, Northern Division.

UNITED STATES, PETITIONER,
vs.
CHANDLER-DUNBAR WATER POWER COMPANY, EDISON Sault Electric Company, International Bridge Company, Michigan-Lake Superior Power Company and St. Mary's Falls Power Company, and the city of Sault Ste. Marie, respondents. } No. 638.

MOTION.

Now comes the United States of America, petitioner, by Fred C. Wetmore, R. T. Strickland, William K. Clute, and Grant Fellows, its attorneys, and move the court now here that the judgement and award herein in favor of the Chandler-Dunbar Water Power Company be limited to the sum of forty-five thousand four hundred sixty-two ($45,462.00) dollars, eliminating and disallowing from said judgement and award the sum of five hundred fifty thousand ($550,000.00) dollars for the raw water power; the sum of eighteen thousand six hundred ($18,600.00) dollars (being 93% of the additional value given the upland "for use as factory site in connection with the development of 6,500 horsepower, either as a single site or for several smaller factories to use the surplus of 6,500 horsepower not now used in the city"); also eliminating twenty-three thousand two hundred fifty ($23,250.00) dollars (being 93% of the sum of twenty-five thousand dollars, which sum was added to the base value from "the fact that it was desirable for use for lock and canal or bridge purposes"); also eliminating the sum of ten thousand ($10,000.00) dollars from the allowance for private claims 95 and 96 "by reason of its desirability for lock and canal pur-
186 poses"; also eliminating the sum of five thousand ($5,000.00), value given "in connection with the land along the rapids if used as a part of the development of the 6,500 horsepower" notwithstanding so much of the finding of the court of fact number nine (9) as reads as follows: "As to the submerged lands out to the boundary, the matter is not so clear. A large part is clearly not directly necessary, at present, for the needs of navigation; but such part is so connected with, and incidental to, the other directly and presently necessary portion as to be affected by, and brought within, the same pervading necessity, and as to make it proper for Congress to take the whole. * * * The necessity for taking all, so applied to the facts here, is a necessity of peculiar character. It may be called a constructive, as distinguished from an actual, necessity. As to the excess beyond a certain amount of land and water,

and taking is secondary and incidental to the taking of the primary body now needed."

And notwithstanding the finding of fact number fourteen (14), which reads as follows: "There is a present established demand for a comparatively small amount of the raw (unimproved) power. The natural increase from the ordinary growth of the community will not more than counterbalance the less when the Government construction work ceases. Any further demand must be created by the promotion of power-consuming concerns. The plan for promoting or securing a wood-pulp mill which would consume all the available power, storing, if necessary, its surplus product during the high water, is feasible and is reasonably probable of execution. Such probability is sufficiently definite and certain to justify the conclusion that all the power has a definite value, instead of the conclusion that most of it is too speculative for computation; and I adopt the former conclusion as the fact. I fix the annual value of the raw power, per theoretical horsepower, as follows: For the first 3,000 h. p., $10.00 each; for the second 3,000 h. p., $7.50 each; for all beyond 6,000 h. p., $5.00 each. The cost of development so far made should be added. These values are on the basis of a per-
187 fect and unincumbered right to the water."

And notwithstanding the finding of fact number twenty (20), which reads as follows: "The present use of the water in direct aid of navigation is only for filling and operating locks and for floating a few logs. The best expert judgment, both of the waterways commission and of the witnesses in this case, is that 4,000 c. s. f. is the maximum amount which will ever be needed for these purposes; and therefore the amount to be needed for navigation, so far as the same can now be definitely determined, must be fixed at this figure, leaving the balance beyond need for navigation. I think, however, that owing to all the contingencies involved, it is impossible to fix this amount with sufficient certainty to make any definite finding of fact relating thereto except as in this and in other paragraphs stated."

And notwithstanding so much of finding of fact number twenty-nine (29) as reads as follows: "The railroad affords access to the upland for heavy traffic, and the maintenance of a side track into this property was one of the things expected and arranged for when the quit claim deed of January, 1908, was given. Claims 95 and 96 give full access to deep-water navigation on Lake Superior. Transmission wires for electricity could cross the canal, as is now done, by conduit under the same, without any prejudice or injury to the public use of the canal."

And notwithstanding the finding of fact number thirty-four (34), which reads as follows: "For about twenty years the Chandler-Dunbar Company or its predecessors, or some one claiming under it, has been developing power at this part of the rapids. This was accomplished by a short transverse dam near the lower boundary of its land extending out a short distance into the stream and then

extending up along the bed of the stream (substantially) parallel to the bank up to the head of the rapids. This dam or wall, toward its upper end, diverged out into the stream the better to divert water into the head-race and into the fore-bay formed by its lower part. Earlier structures of this character were replaced about 1901 by those more extensive ones which existed when this condemna-
188 tion was made. While considerable in extent and cost, they are inconsiderable as compared with the structures now proposed to utilize the whole power, and they were, comparatively speaking, along the bank rather than across the stream. Development of power thereby would be subject to some of the special objections and difficulties which have been noted, but to many and, perhaps, the majority of such objections it would not be subject, or if subject thereto, would be so in a degree very much less than the proposed plan for entire development. From year to year these developers have added to their investment relating to and depending thereon, until such investment at the time of this taking amounted to, approximately, $500,000. The public lighting of the city of Sault Ste. Marie and the maintenance of various industries there were dependent on the power so developed. The United States itself, or contractors working on its public works, has for some years taken electric power from this course and paid therefor to these private parties."

And notwithstanding so much of finding of fact number thirty-five (35) reads as follows: "And it is the plan and expectation of the present officials of the War Department and the present engineering officers in charge of these works, to permit 10,000 c. s. f., or more of water to pass through this power canal under average conditions, and to receive payment therefor by way of a license or rental as contemplated by the act of March, 1909, with reference to surplus water."

And notwithstanding the finding of fact number thirty-six (36) which reads as follows "The plans and specifications approved by the War Department and the engineers, forming part of this general project and now in process of execution, provide for dams, cross and longitudinal, similar to those now in existence, but further out into the bed of the stream. By this structure, it is the plan and expectation of such department and of such officials, to develop water power for sale, pursuant to the provision of this act regarding surplus water."

And notwithstanding the finding of fact number thirty-seven (37) which reads as follows: "The existing structures built by or under the Chandler-Dunbar Company, are in connection with a tail-
189 race excavated upon the below-lying public river bed, whereby there is, at the power house, a fall of 15 feet instead of only the 9-foot fall (effective) which exists on the Chandler-Dunbar property. The existing dam provided for and contemplated setting 9 wheels, each capable of developing under the 15-foot head, 500 horsepower, making a total planned and partly executed develop-

ment of 4,500 horsepower (electrical, equaling 6,500 theoretical). At the time of condemnation four such wheels had been set and were in use. Suitable wheels in the same location and under a 9-foot head would develop 225 horsepower (electrical) each. The outer dike of the existing head race extended to the second span of the bridge, and was capable of diverting into the head race, out of the supposes 60,000 c. s. f., substantially 6,500 c. s. f. The capacity of the four installed wheels under the existing conditions of fall and tail race has been about 2,000 c. s. f., and the amount of water actually diverted through the Chandler-Dunbar head race and works has for some time approximated, but has not exceeded, 2,000 c. s. f."

And notwithstanding the finding of fact number thirty-eight (38) which reads as follows: "The proposed United States structures in the bed of the stream will deliver 7,500 c. s. f. (at stage 601.5) and will produce 12,700 horsepower under a 15-foot head, or 6,500 horsepower under a 9-foot effective head (both theoretical)."

And notwithstanding the finding of fact number forty (40) which reads as follows: "The amount seized or impounded by the Chandler-Dunbar Company's existing development is, and will be, surplus water not needed directly or indirectly for navigation, save by that species of constructive need with reference to which the facts have hereinbefore been found."

And notwithstanding the finding of fact number forty-one (41) which reads as follows: "The amount of water sufficient to develop 6,500 horsepower (4,500 electrical) on the property of the Chandler-Dunbar Company—that is, on a 9-foot effective fall—is the proper figure to be taken in this connection. True, so much water in cubic second-feet has not yet been passed through the head race, and
190 could not be in its present form. Some enlargement of the head opening would be necessary, but the improvements were planned for this 6,500 horsepower, an investment was made, and a business built up on such plan; the tailrace, which would allow this power to be developed with the greater head and the smaller amount of water, was permitted and the acquiescence of the Government agents and the public was in a plan which contemplated and called for so much water as might be necessary to develop 6,500 horsepower; and, I think, it was included in such plan that such development would be wholly upon the Chandler-Dunbar property, if the tail race privilege should not be continued. This, then, justifies and calls for a finding which is, in form, a finding of fact, but which, as I view it, is only a question of drawing the proper legal inference from the various facts found, and accordingly I do find that water sufficient to develop 6,500 horsepower (theoretical) on the property of the Chandler-Dunbar Company, is surplus water for which compensation should be assessed in this proceeding."

And notwithstanding the finding of fact number forty-two (42), which reads as follows: "Such 6,500 horsepower has an annual value of $55,000; a present value of $550,000."

And notwithstanding the finding of fact number forty-three (43), which reads as follows: "The upland along the rapids, comprising the Chandler-Dunbar entry, a part of Portage Street, and part of private land claim No. 3, has an independent value. It is preeminently fitted for a manufacturing site in connection with the water power to be developed. It also has value in connection with the probability that it would be needed for lock and canal or bridge purposes. The value of this parcel is subject to many contingencies, but I fix the same as follows: * * * For a factory site in connection with the proposed development of the entire water power, so as to use thereon or in connection therewith 30,000 horsepower or more, an additional value of $80,000, or a total of $100,000. For use as a factory site in connection with the development of 6,500 horsepower, either as single site or for several smaller factories to
191 use the surplus of 6,500 horsepower not now used in the city, an additional value of $20,000, or a total of $40,000. The fact that it was desirable for use for lock and canal or bridge purposes gives us an additional value element, in each case, of $25,000. The total value of this parcel for this proceeding should therefore be taken as $65,000."

And notwithstand so much of finding of fact number forty-five (45), as reads as follows: "Claims 95 and 96 front upon deep water, above the head of the rapids. They have been used for wharfage for many years, and the wharf*t* structures and the filling now located thereon and extending therefrom have cost approximately $12,000. On the submerged land appurtenant to them (or to the parts sold January 22d, 1908, by the deed reserving all riparian rights) spoil from the lock work has been and is being dumped. It was part of the consideration for this quitclaim of 1908 by the Chandler-Dunbar Company that this fill and dump should be made by the United States, and the complete carrying out of this plan in good faith as then contemplated would have given a large frontage and a considerable area along the upper river supported by those two private claims. I fix the value of these two claims and the dump and fill, made or which should have been made, all as one parcel, as follows: * * * By reason of its desirability for lock and canal purposes, an additional $10,000. In connection with the land along the rapids, if used as a part of the development of the 6,500 horsepower, an additional value of $5,000, or a total of $25,000. To be used in association with the land along the rapids for the development of the entire 30,000 or more horsepower, a still additional value of $25,000, or a total of $50,000.

"For the reasons stated the owners are entitled to the general purpose or base value, plus the canal and lock value element, plus the 6,500 horsepower value element, making a total value of $25,000."

And notwithstanding the finding of fact number fifty-nine (59), which reads as follows: "The plans and specifications referred to in findings 36 and 38 contemplate a cross dam, including the present cross dam of the Edison Sault Electric Company, and extend-

192 ing about 200 feet further into the stream, substantially at right angles with the flow, and a wing dam extending upstream therefrom about 2,000 feet, and the upper end of which will be in the stream about 1,000 feet from the shore. The contract had been made for the construction of such work and such construction was progressing at the time of the trial. All the different plans which have been proposed for development, viz, (a) the first improvement by the Chandler-Dunbar Company; (b) that of the Edison Sault Electric Company adopted and executed about 1901; (c) that of the American Sault Paper Company projected in 1902, but not executed; (d) that of the United States now being executed; and (e) the plan presented by the Chandler-Dunbar Company herein as its basis for computing values are substantially of the same character and show the adoption of substantially the same method."

And notwithstanding so much of finding of fact number sixty (60) as reads as follows: "The plan proposed by the Chandler-Dunbar Company for development, as the basis of its claim of value in this case, contemplated and provided for the passage of ice through the development works. Such provision was sufficient for ordinary conditions."

And notwithstanding so much of finding of fact number sixty-two (62) as reads as follows: "(b) The largest volume of freight now anticipated as proper to be provided for is 200,000,000 tons per year. (c) The volume of flow of 4,000 c. s. f. would provide for the passage of 1,000,000,000 tons of freight per annum, according to present methods and for all forest products now passing."

And notwithstanding the finding of fact number sixty-four (64) which reads as follows: "The land of the Chandler-Dunbar Company herein taken, upland and submerged, forms the most available site for such controlling works, and the most available site for another international bridge anywhere between Lakes Superior and Huron."

And notwithstanding so much of finding of fact number seventy (70) as reads as follows: "(B) As a strategic value growing out of the extent to which it may control or block the most available development by upstream owners, $15,000. (C) As an addi-

193 tional value by reason of its special suitability for lock and canal purposes, $5,000. (D) If it should be held that the riparian owners are entitled to compensation for water power above the 4,000 c. s. f. estimate, and above the 6,500 c. s. f. allowance, then the value of such excess water power appurtenant to Island No. 5 is ten per cent of that to be fixed for the similar rights of the Chandler-Dunbar Company."

For the reason, first. That under Article I, section 8, of the Constitution of the United States which provides that Congress shall have power to regulate commerce with foreign nations and among the several States and with the Indian tribes, the riparian rights of the Chandler-Dunbar Company in the subaqueous land and the

usufruct of the water flowing over such land are subject to the paramount right of the United States for the purpose of commerce which includes navigation without condemnation or compensation, such submerged lands and water being public and not private property.

Second. Because the subaqueous land and the usufruct of the water are not private property of the Chandler-Dunbar Water Power Company as against the United States of America, but are the public property of the Nation and as such are under the dominion and control of Congress and may be used under the direction of Congress for the uses of commerce and navigation without compensation to the riparian owner.

Third. Because the amount of water and subaqueous land needed for the purpose of navigation is a legislative, not a judicial question, Congress having determined that all of such subaqueous lands and water are needed for the purpose of navigation the courts are bound by such determination and can not inquire into the correctness of such conclusion.

Fourth. Because it is not a question of fact for the court to determine how much water and subaqueous lands are needed for navigation purposes, and a finding of fact on such question by the court does not supersede the finding of such fact by Congress.

Fifth. Because the declaration of Congress, found in Section II of the river and harbor bill (being act of Congress of March
194 3rd, 1909, Revised Statutes, page 820–1–2), as follows:

"That the ownership in fee simple absolute by the United States of all lands and property of every kind and description north of the present St. Marys Falls Ship Canal through its entire length and lying between said ship canal and the international boundary line at Sault Ste. Marie, in the State of Michigan, is necessary for the purpose of navigation of said waters and the waters connected therewith" is conclusive, final, and binding on this court.

Sixth. Because no use can be made of said water and subaqueous land by the riparian owner without the consent and license of the United States of America, which consent and license has by the act of Congress been withdrawn, and there is no presumption that after such withdrawal it would be renewed.

Seventh. Because the value of said land for lock purposes cannot be added to the value of said premises. The damages to be paid should be determined by the detriment occasioned to the owner for the property taken, and the amount thereof should not be increased by the fact that the property taken is particularly well adapted to the purposes of the expropriator.

FRED C. WETMORE,
R. T. STRICKLAND,
WM. K. CLUTE,
GRANT FELLOWS,
Attorneys for Petitioner.

71400—13——8

(Endorsed:) In the Circuit Court of the United States for the Western District of Michigan, Northern Division. United States, petitioner, vs. Chandler-Dunbar Water Power Company et al., respondents. Motion to limit recovery. Filed Dec. 28, 1911. Chas. L. Fitch, clerk. Fred C. Wetmore, R. T. Strickland, William K. Clute, Grant Fellows, attorneys for petitioner.

195 United States District Court, Western District of Michigan, Northern Division.

SATURDAY, MAY 4, 1912.

The court met pursuant to adjournment.

Present the honorable Arthur C. Denison, circuit judge, designated.

(Former Circuit Court No. 638.)

In the matter of the condemnation of all lands north of the St. Marys Falls Ship Canal to the international boundary.

In the above-entitled cause the United States having made and filed a motion to the effect that the judgment and award hereinafter made in favor of the Chandler-Dunbar Water Power Company be limited so as to exclude certain sums for water power and canal and lock purposes, for the reason that said lands are surrounded on three sides by Government lands, and that there is no way of necessity across and over the Government lands from the said property of the Chandler Dunbar Water Power Company, and hence that such property has no value for such purposes; and the said motion having come on to be heard during the progress of the trial, after due consideration thereof, and after hearing the argument of counsel for the respective parties, it is ordered that the said motion be and the same is hereby overruled and denied, and this order will take effect as of the 27th day of December, 1911, the announcement in open court of the order overruling said motion having been made during the progress of the trial on the 27th day of December, 1911, but not having been entered.

Approved for entry this 4th day of May, A. D. 1912.

ARTHUR C. DENISON,
Circuit Judge, designated.

196 *Conclusions of law.*

197 In the Circuit Court of the United States for the Western District of Michigan, Northern Division.

UNITED STATES, PETITIONER,

vs.

CHANDLER-DUNBAR WATER POWER COMPANY, EDISON SAULT Electric Company, International Bridge Company, Michigan-Lake Superior Power Company, and St. Mary's Power Company, and the city of Sault Ste. Marie, respondents.

Having been requested to make specific findings of law in this case, I now make and file the same, as follows:

I.

In a general, preliminary way, and subject to the modifications hereafter specified, the Chandler-Dunbar Company was the lawful owner of the flow and fall of the water; that is to say, the water-power rights over against the riparian lands out to the international boundary line.

II.

As to all the property described in the notice of taking herein, there was, as matter of law, a necessity for taking for public use.

III.

The public right to occupy and use, in direct aid of navigation, submerged lands, is paramount to the rights of the private owner, and when such paramount right is exercised by a physical occupation, no right to compensation accrues.

IV.

The act of Congress involved and its legislative history do
198 not evidence an intent to recognize the existence of and to pay for all the water-power rights appurtenant to the lands described in the act; and the act and the taking do not raise a necessary inference of law that compensation is due for all of such water power rights.

V.

The act of Congress involved does not raise the necessary implication of law that no compensation should be paid for any of the water-power rights taken.

VI.

The existing necessity in this case for taking the uplands and some of the submerged lands and flow of the water for purposes of navigation is actual, present, and direct; as to the remainder of the submerged lands and flow of the water such necessity is constructive, secondary, and incidental.

VII.

For the taking of the submerged land and flow of the water directly necessary under the previous paragraph there can be no compensation; for that as to which only the incidental necessity exists compensation must be paid.

VIII.

Where private rights (as water-power rights) are being taken for public use, under the necessity of the constructive or incidental class, the burden is upon the private owner, seeking compensation, to show that the necessity is only theoretical; in other words, and as applied to this case, the burden is on the private owners to show that the surplus water not now needed for navigation will not ever be so needed.

IX.

In such case the burden of proof must rest on the private owner of the water power to show, first, that after the satisfaction of the public right, there will remain a portion of the whole power now being taken, and, second, that this remainder portion is substantial and not speculative, but capable of reasonably certain determination from the proof.

199

X.

The United States is not estopped to dispute either the extent or the value of the water-power rights for which compensation should be paid.

XI.

The United States is not estopped to deny that such water-power rights have any existence which justify assessing any value in this proceeding.

XII.

The effect of the act and of the instrument of taking is that all private water rights which there may be appurtenant to the land described shall be taken, and that compensatory value shall be paid for any such rights, if any, which are not merged in the dominant public right.

XIII.

For the purpose of determining the sale value of water-power property of this kind the annual rental value should be capitalized at ten per cent.

XIV.

In each case of this character the extent of the supersession and absorption of the private right by the dominant public right is a question of fact, and the extent of the servient estate for which compensation is to be assessed in this case must be determined as a specific question in view of the particular facts of this case.

XV.

Public works in direct aid of navigation which should physically occupy all the submerged lands involved so that the flowing water must be diverted elsewhere or which should flood the lands involved with slack water so that the fall of the water would be elsewhere, would be a kind of taking of the private water-power rights for which compensation would not be due.

XVI.

If the title of the private owner of submerged land fails through the assertion of a superior title, he has no separable, remaining interest in the flow and fall of the water thereover; nor if his title fails to part of the channel has he any right to have the water normally flowing thereover diverted to another part of the channel the title to which he retains.

XVII.

In determining the compensations to be awarded for private water rights if taken for public use, it is not to be presumed nor is it a contingency to be considered that the public may arbitrarily refuse to permit the erection of structures necessary to develop the power, and which structures do not in fact in any manner injuriously affect the public right of navigation.

XVIII.

The present record does not justify the conclusion that it might not at some future time be within the limits of discretion of the public officials supervising this waterway to refuse to permit the erection or maintenance of such a cross dam and dike as are proposed by the private owners for the development of the water power.

XIX.

It is not to be presumed nor is it a contingency to be considered in assessing compensation that the Government would not permit upon the submerged land structures necessary to develop the water power and which did not, in fact, affect the public right of navigation, excepting upon the payment of a burdensome license fee in the nature of a rental.

XX.

It cannot be assumed that a future Congress will abdicate its right to build at this point or in this vicinity suitable works to control the level of Lake Superior and will accept, in the place thereof, the right to regulate a privately built, similar structure.

XXI.

No understanding between the Chandler-Dunbar Company and the Secretary of War or his subordinates in connection with the Chandler-Dunbar deed of January, 1908, can operate to de-
201 stroy public rights or to create vested interests as against the public; but as a basis of fixing the value of property affected by such understanding and now taken it should be assumed that such understanding will be carried out in good faith by the United States.

XXII.

No license from the board of supervisors of Chippewa County would be necessary before erecting by the Chandler-Dunbar Company of its proposed cross dam and dike.

XXIII.

It cannot be presumed that the Chandler-Dunbar Company could procure the erection of a dam reaching across to the Canadian shore, nor any necessary flowage of Canadian lands above such dam. Neither the laws of the United States nor of the State of Michigan provide any means for accomplishing such a result.

XXIV.

The burden is upon the riparian owners to show a practical and efficient means of developing power for which they ask compensation.

XXV.

There can be no presumption that the Canadian Government would acquiesce in the proposed plan of development by the Chandler-Dunbar Company, or that it would join or permit its citizens to join in similar development structures on the Canadian side of the line.

XXVI.

In this case, the prima facia or normal right of the riparian
202 to the benefit of the inchoate power on their submerged land (above the maximum of 4,000 c. s. f. estimate for the locks, etc.) is so unusually and peculiarly hampered, uncertain and vague as to put upon the riparians the burden of showing by clear and convincing evidence that the water power for which they ask compensation is beyond the objection that the difficulties of the situation make it too speculative for computation.

XXVII.

The force of the private developments which have been permitted by the United States is evidential; and they do not raise any estoppel against the United States to claim that compensation should not be paid when the permits are revoked.

XXVIII.

In a situation where it is highly probable that there is surplus water which will never be directly needed for navigation, but where the riparian proprietor is unable to show with sufficient clearness how much such surplus is, evidence that the United States, speaking by the acts of those representing it, has acquiesced in a claim or joined in a declaration that certain water is subject to appropriation for power, is of strong evidential force to establish the fact so declared; and in a case otherwise doubtful, may be sufficient to meet the burden resting on the riparian.

XXIX.

The fact that the diversion through the Michigan-Lake Superior power canal was at first supposed not to diminish the flow of water through the rapids on the American side, and the fact that this diversion has been under the control and regulation of the
203 War Department and has been stopped when the War Department thought best, destroy the force of such diversion as evidence upon the question of what water may be beyond need in aid of navigation.

XXX.

The present United States' project for the development of power in the rapids has no evidential force upon the question of what water is beyond need in aid of navigation.

XXXI.

The history of the Chandler-Dunbar-Edison Sault Electric development tends to establish that the water appropriated thereby is and will be surplus water beyond that need for navigation which will justify taking without compensation.

XXXII.

For the purpose just named the amount of water necessary to develop within the limits of the Chandler-Dunbar property the amount of horsepower which the existing works contemplated de-

veloping is to be considered as the amount so appropriated rather than the amount which will develop such power under the additional head which has been permitted, and rather than the amount which will pass the head works in their present condition.

XXXIII.

Water sufficient to develop 6,500 theoretical horsepower is to be considered as surplus water capable of producing power, for which compensation should be awarded to the Chandler-Dunbar Company in this proceeding.

204 XXXIV.

Where private property is to be taken for a public improvement, the fact that the property is so situated that it is naturally suitable for such public improvement and may be desired therefor, is one of the elements to be considered in determining just compensation, when it is so required and taken; but what it may be worth to the public for such improvement is not the proper measure.

XXXV.

No water power rights, as such, in connection with the Portage Street parcel, are entitled to any compensation.

XXXVII.

The fact that the United States, before commencing this proceeding, made an offer to the St. Marys Power Company for Island No. 5, and upon its refusal made the St. Marys Power Company a respondent to this proceeding, does not estop the United States from continuing to claim, in the pending ejectment suit, that it is the owner of this island. The compensation awarded for this island and its appurtenant rights should be paid into court there to await the determination of the title.

XXXVIII.

The fact that there can be no commercial development of itself of the water power inchoate in the flow and fall of water over the submerged lands appurtenant to Island No. 5, will not prevent an award of some compensation for the taking of such potential water power.

XXXIX.

205 The fact that there is intervening ownership between the fall of the Chandler-Dunbar Company and the fall of Island No. 5 makes it improper to award compensation for the water

power appurtenant to Island No. 5 wholly upon the basis of its per centage of the total fall of the two riparian proprietors added together.

XL.

In the absence of any appropriation by the owners of Island No. 5, of any of the water flowing by, there is no sufficient evidence that any of such water is surplus water beyond need in aid of navigation, and the owners of such island are entitled to no compensation whatever directly on account of water power.

XLI.

The so-called strategic value, that is to say, its usefulness in permitting full and economical power development by other riparian owners is an element to be considered in awarding compensation for Island No. 5.

XLII.

The 6,500 horsepower, for which compensation is awarded to the Chandler-Dunbar Company, is not affected by any rights claimed by the Michigan-Lake Superior Power Company, and the latter company has no interest whatever in such 6,500 horsepower or in the compensation awarded therefor.

XLIII.

Such dispute as exists between the Chandler-Dunbar Company and the Michigan-Lake Superior Company should be considered as pertaining to some portion of the surplus above 6,500 horsepower which surplus is found to be subject to be taken without compensation, and no finding in this matter, of fact or of law, is intended to have any bearing upon such dispute.

206

XLIV.

The Whelpley survey was, at most, as to the streets thereon marked, an implied dedication in trust, requiring acceptance before it could become operative.

The facts of this case do not justify the conclusion that there was any such acceptance by the city of that part of Portage Street north of the canal grant.

XLVI.

Reasonable time and opportunity for such acceptance long ago expired.

XLVII.

Whenever it became finally apparent that there was no acceptance by the city of such part of Portage Street, no title or interest passed to the adjoining owners, but the fee title reverted to or remained in the United States.

XLVIII.

No acceptance by the city of this part of the street can be implied from its acceptance of the part south of the canal.

XLIX.

No title to this part of Portage Street has accrued to the Chandler-Dunbar Company by adverse possession.

L.

The award of compensation otherwise to be made to the Chandler-Dunbar Company on account of its uplands along the rapids,
207 should be diminished by seven per cent. on account of its lack of title to the Portage Street subparcel contained thereon.

LI.

If it should be held that the city has title to such Portage Street parcel, then it should receive, as compensation, in this proceeding, seven per cent of the amount awarded to the Chandler-Dunbar Company for this entire upland parcel.

The Court. From the view taken of the facts and which will be specified in the findings to be filed, it follows as matter of law that the compensation for the property and rights described in the petition should be fixed as follows:

(a) To the Michigan-Lake Superior Power Company, nothing.

(b) To the St. Marys Fall Power Company, $21,000.00.

(c) To the city of Sault Ste. Marie, nothing.

(d) To the Edison Sault Electric Company, $300,000.00.

(e) To the Chandler-Dunbar Water Power Company, $652,312, this sum being made up as follows:

For the raw water power	$550,000
For the existing dock	16,524
For the upland, excepting claims 95 and 96 ($65,000 less seven per cent on account Portage Street subparcel)	60,450
Claims 95 and 96	25,000
Half interest in subparcel on bridge property	338
	$652,312

Dated Dec. 28, 1911.

ARTHUR C. DENNISON,
Circuit Judge.

208 Endorsed: The Circuit Court of the United States for the Western District of Michigan, Northern Division. In re

condemnation of lands for "Soo" Canal. Findings of law. Filed Dec. 28, 1911. Chas. L. Fitch, clerk.

209 *Proposed substituted exceptions to finding of facts by U. S.*

210 In the Circuit Court of the United States for the Western District of Michigan, Northern Division.

UNITED STATES, PETITIONER,
vs.
CHANDLER-DUNBAR WATER POWER COMPANY, EDISON SAULT Electric Company, International Bridge Company, Michigan-Lake Superior Power Company, and the City of Sault Ste. Marie, respondents.

EXCEPTIONS OF THE UNITED STATES, PETITIONER, TO THE FINDINGS OF FACT.

And now comes the United States of America, petitioner, by Fred C. Wetmore, R. T. Strickland, William K. Clute, and Grant Fellows, its attorneys, and excepts to the following findings of fact by the court in this case:

I.

The petitioner excepts to so much of finding of fact number nine (9) as reads as follows, viz: "As to the submerged lands out
211 to the boundary, the matter is not so clear. A large part is clearly not directly necessary, at present, for the needs of navigation; but such part is so connected with, and incidental to, the other directly and presently necessary portion, as to be affected by and brought within the same prevading necessity. * * * The necessity for taking all, as applied to the facts here, is a necessity of peculiar character. It may be called a constructive, as distinguished from an actual necessity. As to the excess beyond a certain amount of land and water, the taking is secondary and incidental to the taking of the primary body now needed," because such facts as are therein stated and found are not facts for judicial inquiry or finding, but are exclusively for the consideration and determination of Congress under the commerce clause in Article I, section 8, of the Constitution of the United States, Congress in section 11 of the act under consideration here having determined the necessity, such determination is final and binding on the court.

II.

The petitioner excepts to the finding of fact number fourteen (14), which reads as follows: "There is a present, established demand for a comparatively small amount of the raw (unimproved) power.

The natural increase from the ordinary growth of the community will not more than counterbalance the loss when the Government construction work ceases. Any further demand must be created by the promotion of power-consuming concerns. The plan for promoting or securing a wood-pulp mill which would consume all the available power, storing, if necessary, its surplus product during
212 the high water is feasible, and is reasonably probable of execution. Such probability is sufficiently definite and certain to justify the conclusion that all the power has a definite view, instead of the conclusion that most of it is too speculative for computation; and I adopt the former conclusion as the fact. I fix the annual value of the raw power, per theoretical horsepower, as follows: For the first 3,000 h. p., $10.00 each; for the second 3,000 h. p., $7.50 each; for all beyond 6,000 h. p., $5.00 each. The cost of development so far made should be added. These values are on the basis of a perfect and unincumbered right to the water," because such facts as are therein stated and found are not facts for judicial inquiry or finding, but are exclusively for the consideration and determination of Congress under the commerce clause in Article I, section 8, of the Constitution of the United States, Congress in section 11 of the act under consideration here having determined the necessity, such determination is final and binding on the court.

III.

The petitioner excepts to finding of fact number twenty (20), which reads as follows: "The present use of the water in direct aid of navigation is only for filing and operating locks and for floating a few logs. The best expert judgment, both of the Waterways Commission and of the witnesses in this case, is that 4,000 c. s. f. is the maximum amount which will ever be needed for these purposes; and therefore, the amount to be needed for navigation, so far as the same can now be definitely determined, must be fixed at this figure, leaving the balance beyond need for navigation. I think, how-
213 ever, that owing to all the contingencies involved, it is impossible to fix this amount with sufficient certainty to make any definite finding of fact relating thereto, except as in this and in other paragraphs stated," because such facts as are therein stated and found are not facts for judicial inquiry or finding, but are exclusively for the consideration and determination of Congress under the commerce clause in Article I, section 8, of the Constitution of the United States, Congress in section 11 of the act under consideration here, having determined the necessity; such determination is final and binding on the court.

IV.

The petitioner excepts to so much of finding of fact number twenty-nine (29), as reads as follows, viz: "The railroad affords access to the upland for heavy traffic, and the maintenance of a side

track into this property was one of the things expected and arranged for when the quitclaim deed of January, 1908, was given. Claims 95 and 96 give full access to deep-water navigation on Lake Superior. Transmission wires for electricity could cross the canal, as is now done by conduit under the same, without any prejudice or injury to the public use of the canal," because such facts as are therein stated and found are not facts for judicial inquiry or finding, but are exclusively for the consideration and determination of Congress under the commerce clause in Article I, section 8, of the Constitution of the United States, Congress, in section 11 of the act under consideration here, having determined the necessity, such determination is final and finding on the court.

And for the further reason that the proofs do not show that
214 any valid contract was made between the Government and the Chandler-Dunbar Water Power Company for railroad facilities on Government property, and for the further reason that if any valid contract were made the rights of the Chandler-Dunbar Water Power Company under such contract could not be litigating in this proceeding, but must be presented in the form of a claim against the Government in the Court of Claims.

V.

The petitioner excepts to finding of fact number thirty-four (34), which reads as follows: " For about twenty years the Chandler-Dunbar Company or its predecessors, or some one claiming under it, has been developing power at this part of the rapids. This was accomplished by a short transverse dam near the lower boundary of its land extending out a short distance into the stream and then extending up along the bed of the stream (substantially) parallel to the bank up to the head of the rapids. This dam or wall, toward its upper end, diverged out into the stream the better to divert water into the head race and into the forebay formed by its lower part. Earlier structures of this character were replaced about 1901 by those more extensive ones which existed when this condemnation was made. While considerable in extent and cost, they are inconsiderable as compared with the structures now proposed to utilize the whole power, and they were, comparatively speaking, along the bank rather than across the stream. Development of power thereby would be subject to some of the special objections and difficulties which have been noted, but to many, and perhaps the majority, of such objections it would not be subject, or if subject thereto, would
215 be so in a degree very much less than the proposed plan for entire development. From year to year these developers have added to their investment relating and depending thereon until such investment amounted to approximately $500,000. The public lighting of the city of Sault Ste. Marie and the maintenance of various industries there were dependent on the power so developed. The United States itself, or contractors working on its public works, has

for some years taken electric power from this source and paid therefor to these private parties," because such facts as are therein stated and found are not facts for judicial inquiry or finding, but are exclusively for the consideration and determination of Congress, under the commerce clause in Article I, section 8, of the Constitution of the United States, Congress, in section 11 of the act under consideration here, having determined the necessity, such determination is final and binding on the court.

And for the further reason that the undisputed testimony shows that all developments were made under revocable permits, and that values cannot be built up in this proceeding against the Government by reason of any rights granted under permits which were revocable at the pleasure of the Secretary of War or of Congress. And Congress did not intend to create evidence to be used against the Government with any force whatever for the purpose of building up values for water power by authorizing, as it has, revocable permits to be issued to power companies to develop power in the river when their revocation should be ordered by Congress. It is incompetent to so find in effect such fact and use said instruments as evidential
216 of acquired vested rights against the Government by virtue thereof.

VI.

The petitioner excepts to so much of finding of fact number thirty-five (35) as reads as follows: "And it is the plan and expectation of the present officials of the War Department and the present engineering officers in charge of these works, to permit 10,000 c. s. f., or more, of water to pass through this power canal under average conditions, and to receive payment therefor by way of a license or rental as contemplated by the act of March, 1909, with reference to surplus water," for the reason that public policy forbids the inquiry by the court into the plans of the War Department, and because such facts as are therein stated and found are not facts for judicial inquiry or finding, but are exclusively for the consideration and determination of Congress under the commerce clause in Article A, section 8, of the Constitution of the United States, Congress in section 11 of the act under consideration here having determined the necessity, such determination is final and binding on the court.

VII.

The petitioner excepts to finding of fact number thirty-six (36), which reads as follws: "The plans and specifications approved by the War Department and the engineers forming part of this general project and now in process of execution provide for dams, cross and longitudinal, similar to those now in existence, but further out into the bed of the stream. By this structure, it is the plan and expectation of such department and of such officials to develop water

power for sale, pursuant to the provision of this act regarding
217 surplus water," for the reason that public policy forbids the inquiry by the court into the plans of the War Department, and because such facts as are therein stated and found are not facts for judicial inquiry or finding, but are exclusively for the consideration and determination of Congress under the commerce clause in Article I, section 8, of the Constitution of the United States, Congress in section 11 of the act under consideration here having determined the necessity, such determination is final and binding on the court.

VIII.

The petitioner excepts to finding of fact number thirty-seven (37), which reads as follows: "The existing structures built by or under the Chandler-Dunbar Company, are in connection with a tail race excavated upon the below-lying public river bed, whereby there is, at the power house, a fall of 15 feet instead of only the 9-foot fall (effective) which exists on the Chandler-Dunbar property. The existing dam provided for and contemplated setting 9 wheels, each capable of developing under the 15-foot head, 500 horsepower, making a total planned and partly executed development of 4,500 horsepower (electrical, equaling 6,500 theoretical). At the time of condemnation, four such wheels had been set and were in use. Suitable wheels in the same location and under a 9-foot head would develop 225 horsepower (electrical) each. The outer dike of the existing head race extended to the second span of the bridge, and was capable of diverting into the head race, out of the supposed 60,000 c. s. f., substantially
6,500 c. s. f. The capacity of the four installed wheels under
218 the existing conditions of fall and tail race has been about 2,000 c. s. f., and the amount of water actually diverted through the Chandler-Dunbar head race and works has for some time approximated, but has not exceeded, 2,000 c. s. f.," because such facts as are therein stated and found are not facts for judicial inquiry or finding, but are exclusively for the consideration and determination of Congress under the commerce clause in Article I, section 8, of the Constitution of the United States, Congress in section 11 of the act under consideration here having determined the necessity, such determination is final and binding on the court.

IX.

The petitioner excepts to finding of act thirty-eight (38), which reads as follows: "The proposed United States structures in the bed of the stream will deliver 7,500 c. s. f. (at stage 601.5) and will produce 12,700 horsepower under a 15-foot head, or 7,500 horsepower under a 9-foot effective head (both theoretical)," for the reason that public policy forbids the inquiry by the court into the plans of the War Department, and because such facts as are therein stated and

found are not facts for judicial inquiry or finding, but are exclusively for the consideration and determination of Congress under the commerce clause in Article I, section 8, of the Constitution of the United States, Congress in Section II of the act under consideration here having determined the necessity, such determination is final and binding on the court.

X.

219 The petitioner excepts to finding of fact number forty (40), which reads as follows: "The amount seized or impounded by the Chandler-Dunbar Company's existing development is and will be surplus water not needed directly or indirectly for navigation, save by that species of constructive need with reference to which the facts have hereinbefore been found," because such facts as are therein stated and found are not facts for judicial inquiry or finding, but are exclusively for the consideration and determination of Congress under the commerce clause in Article I, section 8, of the Constitution of the United States, Congress in Section II of the act under consideration here having determined the necessity, such determination is final and binding on the court, and for the further reason that such finding is not supported by the testimony.

XI.

The petitioner excepts to finding of fact number forty-one (41), which reads as follows: "The amount of water sufficient to develop 6,500 horsepower (4,500 electrical) on the property of the Chandler-Dunbar Company, that is, on a 9-foot effective fall, is the proper figure to be taken in this connection. True, so much water in cubic second-feet has not yet been passed through the head race, and could not be in its present form. Some enlargement of the head opening would be necessary, but the improvements were planned for this 6,500 horsepower, an investment was made and a business built up on such plan; the tail race which would allow this power to be developed with the greater head and the smaller amount of water, was permitted, and the acquiescence of the Government agents and
220 the public was in a plan which contemplated and called for so much water as might be necessary to develop 6,500 horsepower; and I think it was included in such plan that such development would be wholly upon the Chandler-Dunbar property, if the tail-race privilege should not be continued. This, then, justifies and calls for a finding which is, in form, a finding of fact, but which, as I view it, is only a question of drawing the proper legal inference from the various facts found, and, accordingly, I do find that water sufficient to develop 6,500 horsepower (theoretical) on the property of the Chandler-Dunbar Company is surplus water, for which compensation should be assessed in this proceeding," because such facts as are therein stated and found are not facts for judicial inquiry or finding, but are exclusively for the consideration and determination

of Congress under the commerce clause in Article I, section 8, of the Constitution of the United States, Congress in Section II of the act under consideration here having determined the necessity, such determination is final and binding on the court.

And for the further reason that the said finding of fact applies the doctrine of estoppel against the Government, and the Government can not be estopped, nor is the issuance of revocable permits, or the failure of the Government to stop and prevent the Chandler-Dunbar Water Power Company from making plans, evidence to be issued against the Government to build up values against it.

XII.

The petitioner excepts to finding of fact number forty-two (42), which reads as follows: "Such 6,500 horsepower has an annual value of $55,000, a present value of $550,000," because such facts as
221 are therein stated and found are not facts for judicial inquiry or finding, but are exclusively for the consideration and determination of Congress under the commerce clause, in Article I, section 8, of the Constitution of the United States, Congress, in section 11 of the act under consideration here, having determined the necessity, such determination is final and binding on the court.

XIII.

The petitioner excepts to so much of finding of fact number forty-three (43) as reads as follows: "The upland along the rapids, comprising the Chandler entry, a part of Portage Street, and part of private land claim No. 3, has an independent value. It is preeminently fitted for a manufacturing site in connection with the water power to be developed. It also has value in connection with the probability that it would be needed for lock and canal or bridge purposes. The value of this parcel is subject to many contingencies, but I fix the same as follows: * * * For a factory site in connection with the proposed development of the entire water power, so as to use thereon or in connection therewith 30,000 horsepower or more, an additional value of $80,000, or a total of $100,000. For use as factory site in connection with the development of 6,500 horsepower, either as single site, or for several smaller factories to use the surplus of 6,500 horsepower not now used in the city, an additional value of $20,000, or a total of 40,000. The fact that it was desirable for use for lock and canal or bridge purposes gives it an additional value element, in each case, of $25,000. The total value of this parcel for this proceeding should, therefore, be taken as $65,000," because such facts as are therein stated and
222 found are not facts for judicial inquiry or finding, but are exclusively for the consideration and determination of Congress under the commerce clause in Article I, section 8, of the Con-

stitution of the United States, Congress in section 11 of the act under consideration here having determined the necessity, such determination is final and binding on the court.

And for the further reason that desirability for lock and canal purposes cannot be considered by the court in making up the award against the Government.

And for the further reason that the necessities of the Government to have such property for lock and canal purposes and to award value for the same on account of such necessity is not a proper measure of value and is against public policy, and further that as to bridge purposes petitioner excepts for the reason that there is not a scintilla of evidence in the case that the location of a bridge site on said property is contemplated by any one having power or authority to execute such a project. There is no existing act of Congress or any treaty of Great Britain contemplating the construction of a bridge across said river which would erect its abutments on these premises. Further, because such bridge value is mere speculation and not within the zone of probability.

XIV.

The petitioner excepts to so much of finding of fact number forty-five (45) as reads as follows: "Claims 95 and 96 front upon deep water above the head of the rapids. They have been used for wharfage for many years, and the wharf structures and the filling
223 now located thereon and extending therefrom have cost approximately $12,000. On the submerged land appurtenant to them (or to the parts sold January 22nd, 1908, by the deed reserving all riparian rights) spoils from the lock work has been and is being dumped. It was part of the consideration for this quitclaim of 1908, by the Chandler-Dunbar Company, that this fill and dump should be made by the United States, and the complete carrying out of this plan in good faith as then contemplated would have given a large frontage and a considerable area along the upper river supported by those two private claims. I fix the value of there two claims and the dump and fill, made, or which should have been made, all as one parcel, as follows: * * * By reason of its desirability for lock and canal purposes, an additional $10,000. In connection with the land along the rapids, if used as a part of the development of the 6,500 horsepower, an additional value of $5,000, or a total of $25,000. To be used in association with the land along the rapids for the development of the entire 30,000 or more horsepower, a still additional value of $25,000, or a total of $50,000.

For the reasons stated the owners are entitled to the general purpose or base value, plus the canal and lock value element, plus the 6,500 horsepower value element, making a total value of $25,000," for the reason that payment of consideration of the quitclaim deed of 1908 by the Chandler-Dunbar Water Power Company (if there was any valid and binding consideration beyond the amount therein named) could not be enforced in this proceeding, nor can the de-

sirability for lock and canal purposes be considered in this
224 proceeding, nor can the value of said property as site for water power development be considered or awarded against the Government.

XV.

The petitioner excepts to finding of fact number fifty-nine (59), which reads as follows: "The plans and specifications referred to in findings 36 and 38 contemplate a cross dam of the Edison Sault Electric Company, and extending about 200 feet further into the stream, substantially at right-angles with the flow, and a wing dam extending upstream therefrom about 2,000 feet, and the upper end of which will be in the stream about 1,000 feet from the shore. The contract had been made for the construction of such work, and such construction was progressing at the time of the trial. All the different plans which have been proposed for development, (viz, (a) the first improvement by the Chandler-Dunbar Company, (b) that of the Edison Sault Electric Company, adopted and executed about 1901, (c) that of the American Sault Paper Company, projected in 1902, but not executed, (d) that of the United States, now being executed, and (e) the plan presented by the Chandler-Dunbar Company herein as its basis for computing values, are substantially of the same character and show the adoption of substantially the same method," because such facts as are therein stated and found are not facts for judicial inquiry or finding, but are exclusively for the consideration and determination of Congress under the commerce clause of the United States, Congress, in section 8, Article I, having determined the necessity, such determination is final and binding on the court.

225

XVI.

The petitioner excepts to so much of finding of fact number sixty-two (62) which reads as follows: " (b) The largest volume of freight now anticipated as proper to be provided for is 200,000,000 tons per year. (c) The volume of flow of 4,000 c. s. f. would provide for the passage of 1,000,000,000 tons of freight per annum, according to present methods, and for all forest products now passing," because such facts as are therein stated and found are not facts for judicial inquiry or finding, but are exclusively for the consideration and determination of Congress under the commerce clause in Article I, section 8, of the Constitution of the United States, Congress, in section 11 of the act under consideration here, having determined the necessity, such determination is final and binding on the court.

XVII.

The petitioner excepts to finding of fact number sixty-four (64) which reads as follows: "The land of the Chandler-Dunbar Company herein taken, upland and submerged, forms the most available

site for such controlling works and the most available site for another international bridge any where between Lakes Superior and Huron," for the reason that there is not testimony to support the same and no testimony that the construction of another international bridge as Sault Ste. Marie is within the bounds of sufficient probability to give the said lands any value by reason of such probability.

XVIII.

The petitioner excepts to so much of finding of fact number seventy (70) which reads as follows: "(b) As a strategic
226 value growing out of the extent to which it may control or block the most available development by upstream owners, $15,000. (c) As an additional value by reason of its special suitability for lock or canal purposes, $5,000. (d) If it should be held that the riparian owners are entitled to compensation for water power above the 4,000 c. s. f. estimate and above the 6,500 c. s. f. allowance, then the value of such excess water power appurtenant to Island No. 5 is ten per cent of that to be fixed for the similar rights of the Chandler-Dunbar Company," for the reason that a strategic value would be a hold up value, and also has reference to water power, and no water power value can be awarded against the Government, and for the further reason that the value of the property for lock and canal purposes cannot be considered by the court in this proceedings, as such value would be measuring the necessities of the Government.

FRED C. WETMORE,
R. T. STRICKLAND,
WM. K. CLUTE,
GRANT FELLOWS,
Attorneys for Petitioner, by Clute.

(Endorsed:) United States District Court, Western District of Michigan, Northern Division. (Former Circuit Court No. 638.) In the matter of the condemnation of all the lands north of the St. Marys Falls Canal to the international boundary. Proposed substituted exceptions of U. S. to findings of fact. Filed May 4, 1912. Chas. L. Fitch, deputy clerk.

227 *Proposed substituted exceptions by U. S. to conclusions of law.*

228 In the Circuit Court of the United States for the Western District of Michigan, Northern Division.

UNITED STATES, PETITIONER,
vs.
CHANDLER-DUNBAR WATER POWER COMPANY, EDISON Sault Electric Company, International Bridge Company, Michigan-Lake Superior Power Company, and St. Marys Power Company, and the city of Sault Ste. Marie, respondents. } No. 638.

EXCEPTIONS BY THE UNITED STATES, PETITIONER, TO CONCLUSIONS OF LAW.

And now comes the United States of America, petitioner, by Fred C. Wetmore, R. T. Strickland, William K. Clute, and Grant Fellows, its attorneys, and excepts to the following conclusions and findings of law made by the court in this case:

I.

229 The petitioner excepts to the conclusion and finding of law number 1, viz, "In a general, preliminary way, and subject to the modifications hereafter specified, the Chandler-Dunbar Company was the lawful owner of the flow and fall of the water; that is to say, the water-power rights over against its riparian lands out to the international boundary line," for the reason that said conclusion is not the law.

II.

The petitioner excepts to the conclusion and finding of law number 5, viz, "The act of Congress involved does not raise the necessary implications of law that no compensation should be paid for any of the water-power rights taken," for the reason that same is not the law.

III.

The petitioner excepts to the conclusion and finding of law number 6, viz, "The existing necessity in this case for taking the uplands and some of the submerged lands and flow of the water for purposes of navigation is actual, present, and direct; as to the remainder of the submerged lands and flow of the water, such necessity is constructive, secondary, and incidental," for the reason that said conclusion is not the law.

IV.

The petitioner excepts to the conclusion and finding of law number seven, viz, "For the taking of the submerged land and flow of the water directly necessary under the previous paragraph, there can be no compensation; for that as to which only the inci-
230 dental necessity exists, compensation must be paid." for the reason that said conclusion is not the law.

V.

The petitioner excepts to the conclusion and finding of law number 8, viz, "Where private rights (as water-power rights) are being taken for public use, under the necessity of the constructive or incidental class, the burden is upon the private owner, seeking compensation, to show that the necessity is only theoretical; in other words,

and as applied to this case, the burden is on the private owner to show that the surplus water not now needed for navigation will not ever be so needed," because said conclusion is not the law.

VI.

The petitioner excepts to the conclusion and finding of law number 9, viz, " In such case the burden of proof must rest on the private owner of the water power to show, first, that after the satisfaction of the public right there will remain a portion of the whole power now being taken, and, second, that this remainder portion is substantial and not speculative, but capable of reasonably certain determination from the proof," for the reason that said conclusion is not the law.

VII.

The petitioner excepts to the conclusion and finding of law number 12, viz, " The effect of the act and of the instrument of taking is that all private water rights which there may be appurtenant to the land described shall be taken, and that compensatory value shall be paid for any such rights, if any, which are not merged in the
231 dominant public right," for the reason that said conclusion is not the law.

VIII.

The petitioner excepts to the conclusion and finding of law number 13, viz, " For the purpose of determining the sale value of water power property of this kind, the annual rental value should be capitalized at ten per cent," for the reason that said conclusion is not the law.

IX.

The petitioner excepts to the conclusion and finding of law number 14, viz, " In each case of this character the extent of the supersession and absorption of the private right by the dominant public right is a question of fact; and the extent of the servient estate for which compensation is to be assessed in this case must be determined as a specific question in view of the particular facts of this case," for the reason that said conclusion is not the law.

X.

The petitioner excepts to the conclusion and finding of law number 17, viz, " In determining the compensation to be awarded for private water rights if taken for public use, it is not to be presumed, nor is it a contingency to be considered, that the public may arbitrarily refuse to permit the erection of structures necessary to develop the

power, and which structures do not, in fact, in any manner injuriously effect the public right of navigation," for the reason that said conclusion is not the law.

232 XI.

The petitioner excepts to the conclusion and finding of law number 19, viz, "It is not to be presumed nor is it a contingency to be considered in assessing compensation, that the Government would not permit, upon the submerged land, structures necessary to develop the water power and which did not, in fact, effect the public right of navigation, excepting upon the payment of a burdensome license fee in the nature of a rental," for the reason that said conclusion is not the law.

XII.

The petitioner excepts to the conclusion and finding of law number 21, viz, "No understanding between the Chandler-Dunbar Company and the Secretary of War or his subordinates, in connection with the Chandler-Dunbar deed of January, 1908, can operate to destroy public rights or to create vested interests as against the public; but as a basis of fixing the value of property affected by such understanding and now taken, it should be assumed that such understanding will be carried out in good faith by the United States," for the reason that said conclusion is not the law.

XIII.

The petitioner excepts to the conclusion and finding of law number 24, viz, "The burden is upon the riparian owners to show a practical and efficient means of developing power for which they ask compensation," for the reason that said conclusion is not the law.

XIV.

233 The petitioner excepts to the conclusion and finding of law number 26, viz, "In this case, the prima facie or normal right of the riparians to the benefit of the inchoate power on their submerged land (above the maximum 4,000 c. s. f. estimate for the locks, etc.) is so unusual and peculiarly hampered, uncertain, and vague as to put upon the riparians the burden of showing by clear and convincing evidence that the water power for which they ask compensation is beyond the objection that the difficulties of the situation make it too speculative for computation," for the reason that said conclusion is not the law.

XV.

The petitioner excepts to that part of conclusion and finding number 27, which reads as follows: "The force of the private develop-

ments which have been permitted by the United States is evidential," for the reason that said conclusion is not the law.

XVI.

The petitioner excepts to the conclusion and finding of law number 28, viz, " In a situation where it is highly probable that there is surplus water which will never be directly needed for navigation, but where the riparian proprietor is unable to show with sufficient clearness how much such surplus is, evidence that the United States, speaking by the acts of those representing it, has acquiesced in a claim or joined in a declaration that certain water is subject to appropriation for power is of strong evidential force to establish the fact so declared; and in a case otherwise doubtful, may be
234 sufficient to meet the burden resting on the riparian," for the reason that said conclusion is not the law.

XVII.

The petitioner excepts to the conclusion and finding of law number 31, viz, " The history of the Chandler-Dunbar, Edison Sault Electric development tends to establish that the water appropriated thereby is and will be surplus water beyond that need for navigation which will justify taking without compensation," for the reason that the conclusion is not the law.

XVIII.

The petitioner excepts to the conclusion and finding of law number 32, viz, " For the purpose just named the amount of water necessary to develop within the limits of the Chandler property the amount of horsepower which the existing works contemplated developing is to be considered as the amount so appropriated rather than the amount which will develop such power under the additional head which has been permitted, and rather than the amount which will pass the head works in present condition," for the reason that said conclusion is not the law.

XIX.

The petitioner excepts to the conclusion and finding of law number 33, viz, " Water sufficient to develop 6,500 theoretical horsepower is to be considered as surplus water capable of producing power, for which compensation should be awarded to the Chandler-Dunbar Company in this proceeding," for the reason that said conclusion is not the law.

235

XX.

The petitioner excepts to the conclusion and finding of law number 34, viz, "Where private property is to be taken for a public improvement, the fact that the property is so situated that it is naturally suitable for such public improvement and may be desired therefor is one of the elements to be considered in determining just compensation, when it is so required and taken; but what it may be worth to the public for such improvement is not the proper measure," for the reason that said conclusion is not the law.

* * * * * * *

XXII.

The petitioner excepts to the conclusion and finding of law number 38, viz, "The fact that there can be no commercial development of itself of the water power inchoate in the flow and fall of water over the submerged lands appurtenant to Island No. 5 will no prevent an award of some compensation for the taking of such potential water power," for the reason that said conclusion is not the law.

236

XXIII.

The petitioner excepts to the conclusion and finding of law number 41, viz, "The so-called strategic value—that is to say, its usefulness in permitting full and economical power development by other riparian owners—is an element to be considered in awarding compensation for Island No. 5," for the reason that said conclusion is not the law.

XXIV.

The petitioner also excepts to the following conclusions of the court, viz, "The COURT. From the view taken of the facts and which will be specified in the findings to be filed, it follows, as matter of law, that the compensation for the property and rights described in the petition should be fixed as follows:

(b) To the St. Mary's Falls Power Company, $21,000.

(e) To the Chandler-Dunbar Water Power Company, $652,312.00, this sum being made up as follows: For the raw water power, $550,000. * * * For the upland, excepting claims 95 and 96 ($65.00 less 7% on account of Portage Street subparcel), $60,450.00; claims 95 and 96, $25,000," for the reason that said conclusion is not the law.

FRED C. WETMORE,
R. T. STRICKLAND,
WM. K. CLUTE,
GRANT FELLOWS,
Attorneys for petitioner, by Clute.

237 (Endorsed:) United States District Court, Western District of Michigan, Northern Division. In the matter of the condemnation of all the lands north of the St. Marys Falls Canal to the international boundary. Proposed substituted exceptions by U. S. to conclusions of law. Filed May 4, 1912. Chas. L. Fitch, deputy clerk.

238 *Proposed substituted exceptions by U. S. to refusal to conclude on law as requested by U. S.*

239 In the Circuit Court of the United States for the Western District of Michigan, Northern Division.

UNITED STATES, PETITIONER, *vs.* CHANDLER-DUNBAR WATER POWER COMPANY, EDISON Sault Electric Company, International Bridge Company, Michigan-Lake Superior Power Company, and St. Mary's Power Company, and the city of Sault Ste. Marie, respondents.	No. 638.

EXCEPTIONS TO THE REFUSAL OF THE COURT TO CONCLUDE AND FIND AS MATTER OF LAW AS REQUESTED BY THE PETITIONER.

And now comes the United States of America, petitioner, by Fred C. Wetmore, R. T. Strickland, William K. Clute, and Grant Fellows, its attorneys, and excepts to the refusal of the court to conclude and find as matter of law as requested by the said petitioner in this case.

240 I.

The petitioner excepts to the refusal of the court to conclude and find as matter of law as requested by the said petitioner in its 3rd request, viz, "That the dominion of the United States over the navigable waters for the purpose of commerce is the same as over the public domain," because said requested conclusion is the law and the ruling should have been an unqualified approval thereof.

II.

The petitioner excepts to the refusal of the court to conclude and find as matter of law as requested by the said petitioner in its 5th request, viz, "That the navigable waters of the United States, with their beds, for the purpose of commerce and navigation being the public property of the nation when any portion of this property is required by the United States for its uses in aid of navigation there is no condemnation necessary. It is only necessary for Congress to order the taking of the part needed for the specified use," and to the modification thereof, because said requested conclusion is the law and the ruling should have been an unqualified approval thereof.

III.

The petitioner excepts to the refusal of the court to conclude and find as matter of law as requested by the said petitioner in its 6th request, viz, "That the necessity or expediency of appropriating a part or all of the waters of St. Marys River for public use cannot be the subject of judicial cognizance," because said requested conclusion is the law and the ruling should have been an unqualified approval thereof.

241 IV.

The petitioner excepts to the refusal of the court to conclude and find as matter of law as requested by the said petitioner in its 7th request, viz, "That the act of March 3rd, 1909, did not mention specifically that compensation should be paid to the riparian owner for the taking of the waters of St. Marys River, and did not contemplate such a payment, for in section eleven it provided 'any moneys payable by the Government under the provisions of this section shall be payable out of any money heretofore authorized or appropriated for the purpose of improving St. Marys River at the Falls, Michigan,' and the money authorized and appropriated before (heretofore) the passage of said act of March 3rd, 1909, amounted to only 'one hundred thousand dollars' (act of June 30, 1906, 34 Stat. L., 739), and since March 3, 1909 'two hundred and twenty-five thousand dollars' (act of March 4, 1909, 35 Stat. L., 998), these sums together amounting to $325,000, which is $225,000.00 less than the proposed award for water power, $550,000.00, leaving nothing for the value of the physical properties and uplands," because said requested conclusion is the law and the ruling should have been unqualified approval thereof.

V.

The petitioner excepts to the refusal of the court to conclude and find as matter of law as requested by the said petitioner in its 8th request, viz, "That there is now no appropriation by Congress out of which the sum of $550,000 may be paid for 'water power' and
242 none 'heretofore made for that purpose,'" because said requested conclusion is the law and the ruling should have been an unqualified approval thereof.

VI.

The petitioner excepts to the refusal of the court to conclude and find as matter of law as requested by the said petitioner in its 10th request, viz, "That while the submerged land remains a part of the bed of the river it is not private property in the sense of the fifth amendment to the Federal Constitution," because said requested conclusion is the law, and the ruling should have been an unqualified approval thereof.

VII.

The petitioner excepts to the refusal of the court to conclude and find as matter of law as requested by the said petitioner in its 11th request, viz, "That compensation cannot be claimed for damages done to riparian owners where property is taken or their rights restricted in aid of commerce and navigation," because said requested conclusion is the law, and the ruling should have been an unqualified approval thereof.

VIII.

The said petitioner excepts to the statement of the court that request number 12, viz, "That under the power conferred upon Congress by the Constitution to regulate commerce, the United States possesses, provided Congress sees fit to exercise it, the right to control all structures and works which interfere in any manner with the navigable capacity of navigable waters of the United States
243 which, either by themselves or in connection with other waters, for channels for interstate commerce "is not controlling on the question of compensation," because said requested conclusion is the law, and the ruling should have been an unqualified approval thereof.

IX.

The said petitioner excepts to the refusal of the court to conclude and find as a matter of law as requested by the petitioner in its 13th request, viz, "That the creation of any obstruction to the navigable capacity of any of the waters of the United States, not affirmatively authorized by Congress, is unlawful, and it is unlawful to construct or commence the construction of any bridge, dam, dike, or causeway over or in any port, roadway, haven, harbor, canal, navigable river, or other navigable water of the United States until the consent of Congress to the building of such structures shall have been obtained, and until the plans for the same shall have been submitted to and approved by the Chief of Engineers and by the Secretary of War, a violation of which shall be deemed a misdemeanor punishable by a fine or imprisonment (sections 9, 10, and 12, act of March 3, 1899, 30 Stat. L., p. 1151)," because said requested conclusion is the law, and the ruling should have been an unqualified approval thereof.

X.

The said petitioner excepts to the statement of the court that request number fourteen (14), viz, "That in view of the provisions of sections nine, ten, and twelve of said act of March 3, 1899, structures of any character cannot lawfully be placed in or over any of
244 the navigable waters of the United States without permits issued by consent of Congress upon the recommendation of

the Chief of Engineers when approved by the Secretary of War," is not controlling on the question of compensation, and petitioner excepts to the refusal to find and conclude as requested in said request No. 14, because said requested conclusion is the law, and the ruling should have been an unqualified approval thereof.

XI.

The said petitioner excepts to the refusal to find, as requested in request number 15, viz, "That to preserve the navigable waters for purposes of navigation such permits must contain terms and conditions and be revocable at the pleasure of the Government according to the needs of navigation, otherwise the control of said waters would be in part surrendered to private parties" and to the modification thereof by adding "But the needs of navigation must not be merely imaginary; see opinion," because said requested conclusion is the law, and the ruling should have been an unqualified approval of the same.

XII.

The said petitioner excepts to the statement of the court that the petitioner's request number 18, viz, "That a court has not the power to decide or assume permits will be issued to persons to erect structures in navigable waters under the control of Congress, in view of the provisions of the act of March 3, 1899," is not controlling on the question of compensation, because said requested conclusion is the law, and the ruling should have been an unqualified approval thereof.

245

XIII.

The petitioner excepts to the refusal of the court to conclude and find, as matter of law, as requested by the said petitioner in its 20th request, viz, "There is no legal interruption to the actual navigable capacity and character of said river adjacent to the uplands described in the petition, of which said courts will also take judicial notice," because said requested conclusion is the law, and the ruling should have been an unqualified approval thereof.

XIV.

The petitioner excepts to the refusal of the court to conclude and find, as matter of law, as requested by the said petitioner in its 21st request, viz, "The people of the United States own the right, under treaties and the law of nations, to navigate said waters from shore to shore, and more particularly under the laws of the United States, from the south shore to the international boundary line throughout the full extent of the river, and to use and improve it in aid of such right of navigation to which right of public ownership and use private ownership and use of the submerged land therein

and waters flowing over the same is subservient, and that such navigation right, with all its incidents, is a part of the public domain of the United States and a paramount right in said river," because said requested conclusion is the law, and the ruling should have been an unqualified approval thereof.

XV.

The petitioner excepts to the refusal of the court to conclude
246 and find, as a matter of law, as requested by the said petitioner in its 23rd request, viz, "The Federal courts possess no power to parcel out the waters of said navigable river between the public and the private owners of the submerged lands, which are appurtenant to the uplands described in the petition, and declare by a judgment or decree that any portion of said navigable waters is not needed for navigation and is surplus water over and above navigation needs; is the absolute private property of the riparian owner, and that, if used by the public in its exercise of the right to regulate navigation on said river, either now or in the future, must be either condemned or bought and paid for from the owner of the fee to such subaqueous land," because said requested conclusion is the law, and the ruling should have been an unqualified approval thereof.

XVI.

The petitioner excepts to the refusal of the court to conclude and find as matter of law as requested by the said petitioner in its 24th request, viz, "The determination of Congress, by the provision of section 11, act of March 3, 1909, 35 U. S. Stats., p. 820–1–2, of the necessity for the vacation of the river bed of St. Marys River at the Falls, by private persons or corporations (who have heretofore occupied the same and developed, to a certain extent, water power in said river), because of the public necessity of the occupation thereof, for the purpose of regulating navigation and erecting improvements therein, and requiring said power-development companies to vacate the bed of the stream and the taking of the possession thereof and
erection upon the submerged lands of public works in aid of
247 navigation is not a taking of private property for public use within the meaning of the fifth amendment to the Federal Constitution, and requires no condemnation or compensation before such right upon the submerged lands may be exercised," because said requested conclusion is the law, and the ruling should have been an unqualified approval thereof.

XVII.

The said petitioner excepts to the refusal to find as requested in request number 22, viz, "If, in the installation in said river bed of

public works of the Government, primarily intended as improvements to navigation or in the methods of said navigation, carried on by the Government, there may be from time to time found a quantity of water which can be availed of for developing power, it is competent for the Government to conserve and use said power from the economic policy of preventing waste of natural resources; it is merely incident to regulation of navigation and is not a taking of private property without compensation for the Government to use, sell, or lease such possible surplus power so developed by its own works in aid of navigation and apply the proceeds to the public treasury," and to the modification thereof by adding, "But the intention that the public works shall be an improvement to navigation must be real and not a pretense; if in part a pretense, then, pro tanto, the result specified in this request will not follow," because said requested conclusion is the law, and the ruling should have been an unqualified approval thereof.

XVIII.

248 The said petitioner excepts to the refusal to find as requested in request number 26, viz, "None of the permits, which are in evidence, that were issued by the Secretary of War to the Chandler-Dunbar Company or the Edison Sault Company, or their predecessors, relative to their occupancy and use of the river for the purpose of developing power therein, created any vested property right, as against the organized public seeking to improve navigation, to continue such occupancy of the river bed and to continue to use and develop such power, after the permits were revoked, as by the terms of said permits they were all revocable and have been revoked," and to the modification thereof by adding, "But such permits and their history may have evidential force on the subject of what is surplus water appropriated for power. See opinion," because said requested conclusion is the law and the ruling should have been an unqualified approval thereof.

XIX.

The said petitioner excepts to the refusal of the court to conclude and find as matter of law as requested by the said petitioner in its 27th request, viz, "Failure or refusal of said companies or persons so occupying and using said river bed and the waters therein to vacate the river bed, after revocation of such permits, and a continued occupancy and possession by them of the same with their structures and machinery for their private uses, in developing power, after such revocation were to take effect, constituted them per se public nuisances in said river," because said requested conclusion is the law and the ruling should have been an unqualified approval thereof.

249

XX.

The said petitioner excepts to the refusal of the court to conclude and find as matter of law as requested by the said petitioner in its 28th request, viz, "The governmental necessity to have the lands described in the petition for the purpose of erecting thereon canals and locks and other public works, in aid of navigation, is not an element of value to be added to making up the owner's award and not an increment of value in said property to which the private owner is entitled. Nor can the favorable location of the property, for the installation of canals and locks thereon or a so-called strategic value claimed therein be considered as a factor for the purpose of enhancing the value of the property to the private owner in these proceedings, since such value would be made up of the necessity of the Government to have the property for a public use. Public works herein described are authorized and constructed in the general interests of the people in aid of interstate marine commerce on the Great Lakes and not for the enhancement of the value of private property upon which they are or may be erected," because said requested conclusion is the law and the ruling should have been an unqualified approval thereof.

XXI.

The said petitioner excepts to the refusal to find as requested in request number 30, viz, "If any value above one dollar, the recited consideration in said deed, attaches to said lands, and the conveyance thereof to the United States, for which said company is entitled to compensation from the United States, its remedy is not in this
250 proceeding but is in the Court of Claims" and to the modification thereof by adding, "But the facts referred to in request 29 and 30 have a bearing on the amount of compensation to be awarded for the further lands now taken," because said requested conclusion is the law and the ruling should have been an unqualified approval thereof.

XXII.

The said petitioner excepts to the refusal to find as requested in request 31, viz, "The declaration of Congress, found in section 11 of the river and harbor bill (being act of Congress of March 3, 1909, Revised Statutes, pages 820–1–2), as follows: 'That the ownership in fee simple absolute by the United States of all lands and property of every kind and description north of the present St. Marys Falls Ship Canal throughout its entire length and lying between said ship canal and the international boundary line at Sault Ste. Marie, in the State of Michigan, is necessary for the purpose of navigation of said waters and the waters connected therewith,' is conclusive, final, and binding on this court," and to the modification thereof by add-

ing: "But the exact character and effect of the necessity declared are questions remaining for consideration," because said requested conclusion is the law, and the ruling should have been an unqualified approval thereof.

XXIII.

The said petitioner excepts to the refusal of the court to conclude and find as matter of law as requested by the said petitioner in its 32nd request, viz: "The subaqueous land and the usufruct of
251 the water adjoining the premises of the Chandler-Dunbar Water Power Company are the public property of the Nation and their use is under the control of Congress," because said requested conclusion is the law, and the ruling should have been an unqualified approval thereof.

XXIV.

The said petitioner excepts to the refusal of the court to conclude and find as matter of law as requested by the said petitioner in its 33rd request, "The Chandler-Dunbar Water Power Company have no private property in the subaqueous land, or the usufruct of the water adjacent to its uplands as against the Government which requires compensation by the Government," because said requested conclusion is the law, and the ruling should have been an unqualified approval thereof.

XXV.

The said petitioner excepts to the refusal of the court to conclude and find as matter of law as requested by the said petitioner in its 36th request, viz, "The value of any of the premises for lock and canal purposes can not be taken into consideration in making the award," because said requested conclusion is the law, and the ruling should have been an unqualified approval thereof.

XXVI.

The said petitioner excepts to the refusal of the court to conclude and find as matter of law as requested by the said petition in its 37th request, viz, "The strategic value of any of the property
252 taken can not be considered in making the award," because said requested conclusion is the law, and the ruling should have been an unqualified approval thereof.

XXVII.

The said petitioner excepts to the refusal to find, as requested in request thirty-eight, viz, "Vested rights can not be acquired under revocable permits from the Government, and the Chandler-Dunbar

Water Power Company acquired no vested rights in the St. Mary's River by reason of the issuance to them of the revocable permits," and to the modification thereof by adding "I give only evidential force to the permits and their history," because said requested conclusion is the law, and the ruling should have been an unqualified approval thereof.

XXVIII.

The said petitioner excepts to the refusal of the court to conclude and find as matter of law, as requested by the petitioner in its 39 request, viz, "Any obstruction in the St. Mary's River without the permission of the Government is a nuisance per se. No riparian owner has the right to put any dam or other obstruction in the stream." And the said petitioner further excepts to the statement of the court, "I conceive there might be obstructions which would not, by any possibility, injuriously affect any public right," because said requested conclusion is the law, and the ruling should have been an unqualified approval thereof.

253

XIX.

The said petitioner excepts to the refusal of the court to conclude and find as matter of law as requested by the petitioner in its 40th request, viz, "The Chandler-Dunbar Water Power Company is estopped by reason of its acceptance of the revocable permits from claiming against the Government any private property in the subaqueous lands or the usufruct of the waters of St. Mary's River," because said requested conclusion is the law, and the ruling should have been an unqualified approval thereof.

XXX.

The said petitioner excepts to the refusal of the court to conclude and find as matter of law, as requested by the petitioner in its 42nd request, viz, "Riparian owners along navigable rivers have not private property in such stream against the Government, can not dam or obstruct them without governmental license, and therefore are not entitled to compensation from the Government when appropriated by the Government for public purposes," because said requested conclusion is the law, and the ruling should have been an unqualified approval thereof.

XXXI.

The said petitioner excepts to the refusal to find as requested in request 43, viz, "That the damages to be paid should be determined by the detriment occasioned to the owner of the property taken and the amount thereof should be neither increased nor diminished by

the fact that the property taken is peculiarly well adapted to
254 the purposes of the exproprietor," and to the modification thereof by adding, "I do not regard this as inconsistent with the conclusion that suitability for lock and canal purposes is one element of value to be considered, because the detriment to the owner consists in the taking of every element of value which the property had,' because said requested conclusion is the law, and the ruling should have been an unqualified approval thereof.

XXXII.

The petitioner excepts to the refusal of the court to conclude and find as matter of law as requested by the petitioner in its 44th request, viz, "I find as a matter of law that under ART. I, section 8, of the Constitution of the United States, which provides that Congress shall have the power 'to regulate commerce with foreign nations and among the several States, and with the Indian tribes,' the riparian rights of the Chandler-Dunbar Company in the subaqueous land and the usufruct of the waters flowing over such land are subject to the paramount right of the United States for the purpose of commerce which includes navigation without condemnation or compensation, such submerged lands and waters being public and not private property," because said requested conclusion is the law, and the ruling should have been an unqualified approval thereof.

FRED C. WETMORE,
R. T. STRICKLAND,
WM. K. CLUTE,
GRANT FELLOWS,
Attorneys for Petitioner, by Clute.

255 (Endorsed:) United States District Court, Western District of Michigan, Northern Division. In the matter of the condemnation of all the lands north of the St. Marys Falls Canal to the international boundary. Proposed substituted exceptions by U. S. to refusal to conclude on law as requested by U. S. Filed May 4, 1912. Chas. L. Fitch, deputy clerk.

256 United States District Court, Western District of Michigan, Northern Division.

SATURDAY, MAY 4, 1912.

The court met pursuant to adjournment.

Present, the honorable Arthur C. Denison, circuit judge, designated.

In the matter of the condemnation of all lands north of the St. Marys Falls Ship Canal to the international boundary.

In this matter counsel for the United States, desiring to file substituted exceptions to the refusal of the court to conclude and find as matter of law as requested by petitioner, and substituted exceptions to the conclusions of law and substituted exceptions to the findings of fact as found and filed by the court, and the said substituted exceptions having been presented to the court and noted, and the same presenting the exceptions that were made and argued to the court during the progress of the trial.

It is ordered that the said substituted exceptions to the conclusions of law and findings of fact and to the refusal of the court to conclude and find as matter of law as requested by petitioner may be filed to take effect as of the 28th of December, 1911, and after the findings of law and fact as found and filed by the court on that date.

Approved for entry May 4, 1912.

ARTHUR C. DENISON,
Circuit Judge, designated.

257 *Exceptions of U. S. to approval of Chandler-Dunbar Water Power Company's conclusions of law.*

258 In the Circuit Court of the United States for the Western District of Michigan, Northern Division.

UNITED STATES, PETITIONER,
vs.
CHANDLER-DUNBAR WATER POWER COMPANY, EDISON Sault Electric Company, International Bridge Company, Michigan-Lake Superior Power Company, and St. Mary's Power Company and the City of Sault Ste. Marie, respondents.

EXCEPTIONS BY THE UNITED STATES TO THE GRANTING AND APPROVING OF THE REQUESTS OF RESPONDENT, CHANDLER-DUNBAR WATER POWER COMPANY, FOR CONCLUSIONS AND FINDINGS OF LAW.

And now comes the petitioner, the United States of America, by Fred C. Wetmore, R. T. Strickland, William K. Clute, and Grant Fellows, its attorneys, and excepts to the granting and approving of requests of the Chandler-Dunbar Water Power Company for conclusions and findings of law.

259 I.

The petitioner excepts to the granting and approving of the 7th request of the Chandler-Dunbar Water Power Company, viz, "In considering the just compensation to be awarded the Chandler-Dunbar Water Power Company on account of the taking of title to this water power, it must be supposed that the United States, while fostering to the utmost the interests of and improvement of naviga-

tion, would not cause any interference with or diminution of the value of such riparian water power beyond such interference or diminution as would be necessary for such fostering of and improvement of navigation."

II.

The petitioner excepts to the granting and approving of the 10th request of the Chandler-Dunbar Water Power Company, viz, "The compensation to which the Chandler-Dunbar Water Power Company is entitled for its property taken cannot be substantially less than the property—proprietary—value acquired by the United States by the taking."

III.

The petitioner excepts to the granting and approving of the 13th request of the Chandler-Dunbar Water Power Company, viz, "It is not competent for the United States to take, without compensation, the property of the American riparian at the Sault to satisfy Canada for a taking of common water at some other point."

260

IV.

The petitioner excepts to the granting and approving of the 18th request of the Chandler-Dunbar Water Power Company, viz, "Presumably the Canadian courts would enforce the rights of American riparians against wrong doers on the Canadian side of the international boundary. Also presumably, the Federal courts would enforce the rights of Canadian riparians against wrong doers on the American side."

V.

The petitioner excepts to the granting and approving of the 19th request of the Chandler-Dunbar Water Power Company, viz, "The act of Congress of September 26, 1850, providing for the settlement of claims for land at Sault Ste. Marie, did not authorize any acknowledgment to be made of map of the village therein provided for, but required the map to be transmitted to the Commissioner of the General Land Office.

Under the statute of the State of Michigan in force at the time of the making of said map, called the Whelpley map, a map without an acknowledgment was of no force or validity for purposes of a statutory dedication."

VI.

The petitioner excepts to the granting and approving of the 20th request of the Chandler-Dunbar Water Power Company, viz, "Subject to the power of Congress to regulate commerce the Chandler-Dunbar Water Power Company as a riparian proprietor was en-

titled to the continued natural flow of the water of the River St. Mary past its shore without diminution or alteration."

VII.

The petitioner excepts to the granting and approving of the 21st request of the Chandler-Dunbar Water Power Company, viz, "The right to build a wing dam in the bed of the River St. Mary
261 is a common law right, which has not been modified or changed in Michigan by the constitution or any statute, and is in force in the State of Michigan, excepting as the same is subject to the power of Congress to regulate."

VIII.

The petitioner excepts to the granting and approving of the 22nd request of the Chandler-Dunbar Water Power Company, viz, "The Chandler-Dunbar Water Power Company was not legally required to obtain a permit or consent of the board of supervisors of Chippewa County to put improvements or structures in the River St. Mary."

FRED C. WETMORE,
REVES T. STRICKLAND,
WILLIAM K. CLUTE,
GRANT FELLOWS,
Attorneys for Petitioner.

(Endorsed:) In the Circuit Court of the United States for the Western District of Michigan, Northern Division. United States, petitioner, vs. Chandler-Dunbar Water Power Company et al., respondents. Exceptions by the U. S. to the granting and approving of the requests of respondent Chandler-Dunbar Water Power Co. for conclusions and findings of law. Filed Dec. 28, 1911. Chas. L. Fitch, clerk. Fred C. Wetmore, R. T. Strickland, William K. Clute, Grant Fellows, attorneys for petitioner.

262 *Exceptions by U. S. to approval of St. Marys Power Company and Michigan Lake Superior Power Company's conclusions of law.*

263 In the Circuit Court of the United States for the Western District of Michigan, Northern Division.

No. 638.

In the matter of the condemnation of all lands north of the St. Marys Falls Ship Canal to the international boundary.

EXCEPTIONS BY THE UNITED STATES TO THE GRANTING AND APPROVING OF THE REQUESTS OF THE ST. MARYS FALLS POWER COMPANY AND MICHIGAN-LAKE SUPERIOR POWER COMPANY FOR CONCLUSIONS AND FINDINGS OF LAW.

Now comes the petitioner, the United States, by Fred C. Wetmore, R. T. Strickland, Wm. K. Clute, and Grant Fellows, its attorneys, and excepts to the granting and approving of requests of the St. Marys Falls Power Company and the Michigan-Lake Superior Power Company for conclusions and findings.

I.

The petitioner excepts to the granting and approving of the 2nd request of the said companies, viz, "It is not a proper rule of law to segregate Island No. 5 as a distinct parcel and determine the water power appurtenant to it as valueless."

264

II.

The petitioner excepts to the granting and approving of the 3rd request of the said companies, viz, "Island No. 5, by reason of its location, has a natural value for lock and canal purposes, and has a special desirability for either or both of such purposes."

III.

The petitioner excepts to the granting and approving of the 4th request of the said companies, viz, "Island No. 5 has a strategic value of a substantial character, one capable of pecuniary measurement, and on which account compensation should and must be paid for such element of value."

FRED C. WETMORE,
R. T. STRICKLAND,
GRANT FELLOWS, and
WM. K. CLUTE,
Attorneys for Petitioner.

(Endorsed:) Circuit Court of the United States for the Western District of Michigan, Northern Division. In the matter of the condemnation of all lands north of the St. Marys Falls Ship Canal to the international boundary. Exceptions to the granting and approving of the requests of the St. Marys Falls Power Company and Michigan-Lake Superior Power Company for conclusions and findings of law. Filed Dec. 28, 1911. Chas. L. Fitch, clerk. Fred C. Wetmore, R. T. Strickland, Wm. K. Clute, Grant Fellows, attorneys for petitioner.

265 In the Circuit Court of the United States for the Western District of Michigan, Northern Division.

UNITED STATES, PETITIONER,
vs.
CHANDLER-DUNBAR WATER POWER COMPANY, Edison Sault Electric Company et al., respondents.

Hereby stipulated that Mr. J. H. Goff shall be substituted as solicitor for the said two respondents in place of Mr. A. B. Eldredge.

A. B. ELDREDGE,
Solicitor for said Respondents.
WM. K. CLUTE,
Special Asst. U. S. Atty. for Petitioner.

I consent to act as solicitor for the said respondents.

JOHN H. GOFF.

(Endorsed:) No. 638. United States vs. Chandler-Dunbar Water Power Co. et al., respondents. Consent to substitution of attorney. Filed Dec. 28, 1911. Chas. L. Fitch, clerk. John H. Goff, atty. for Chandler-Dunbar Water Power Co. et al.

266 *Exceptions to Par. LI of conclusions of law.*

267 United States District Court for the Western District of Michigan, Northern Division.

(Former Circuit Court No. 638.)

In the matter of the petition of the United States to condemn all the lands north of St. Marys Falls Ship Canal to the international boundary, &c.

EXCEPTIONS TO PARAGRAPH LI OF FINDINGS OF LAW.

Now comes the United States, petitioner, by Reeves T. Strickland, Special Assistant Attorney General, and Grant Fellows and Wm. K. Clute, special assistant U. S. attorneys, and excepts in the respects hereinafter indicated to that portion of Paragraph LI of findings of law as reads as follows:

"The COURT. From the view taken of the facts and which will be specified in the findings to be filed, it follows as matter of law that the compensation for the property and rights described in the petition should be fixed, as follows: * * *

"(b) To the St. Marys Falls Power Company, $21,000."

"(e) To the Chandler-Dunbar Water Power Company, $652,312, this sum being made up as follows:

For the raw water power	$550,000
For the existing dike	16,524
For the upland, excepting claims 95 and 96 ($65,000 less seven per cent on account of Portage Street subparcel)	60,450
Claims 95 and 96	25,000
Half interest in subparcel on bridge property	338
	$652,312"

268

II.

There should be eliminated therefrom as compensation to the St. Marys Power Company the entire sum of $21,000, because said island is the property of the United States and said company never had any right, title, or interest in or to the same.

III.

If said campany does own said island, there should be eliminated therefrom—

1. $5,000 * * * "as an additional value by reason of its special suitability for lock and canal purposes" * * * as found in Par. LXX (c) of findings of fact, for the reason that, as a matter of law, the governmental necessity to have the said island for the purpose of erecting thereon canals and locks and other public works, in aid of navigation and incident thereto, pursuant to the regulation of interstate and international commerce, is not an element of value competent to be included in making up the award of compensation to the owner of said island, nor can its favorable location for the installation thereon of canals and locks be treated as a factor for the purpose of enhancing its value to the private owner, since such value is made up of the necessity of the Government to have the property for public use.

2. There should also be eliminated therefrom a further sum of $15,000 * * * "as a strategic value growing out of the extent to which it may control or block the most available development by up stream owners" * * * as found in Par. LXX (b) of findings of fact, for the reason—

269 (a) That the said so-called strategic value is not an increment competent to be awarded to the owners thereof as a part of their compensation in these proceedings, there being no appurtenant potential water power attaching to the said island.

(b) The premises next westerly from said island on the main shore and also the shore lands on the south side of the channel between said island and the main shore is the property of the United

States, and there is no probability that any power company could acquire said Government lands for the purpose of developing water power thereon in connection with Island No. 5.

(c) No upper riparian owner is affected by any strategic value in connection with said island. No private owner thereof as against the United States could manipulate any asserted riparian right attaching to said island to thwart the Chandler-Dunbar Water Power Company or any other upper private riparian owner in the development of power on their premises, for the reason that said upper riparian owners possess no right to develop power as against the Government, since it has taken all said upper riparian submerged lands, as well as the shore lands, for the purpose of installing works thereon in aid of navigation.

IV.

There should be eliminated therefrom as compensation to the Chandler-Dunbar Water Power Company the sum of $550,000 for the "raw water power" for the reason—

(a) That the Chandler-Dunbar Water Power Company's title to the submerged lands is burdened with a trust which vests in the public the usufruct of said waters and the right to erect struc-
270 tures on the submerged lands for public navigation uses without condemnation or compensation, which beneficial rights are a part of the public domain and are paramount public rights in the river. In the exercise of these rights all the submerged lands and the usufruct of the water flowing over the same have been appropriated by the United States under section 11 of the act of March 3, 1909, for navigation uses in the improvement of the Great Lakes system, of which said waters of the St. Marys River is a constituent part, said taking and appropriation having been exercised by Congress pursuant to the 3d clause of article 1, section 8, of the Constitution. When so taken and appropriated by the Government, neither the usufruct of said waters nor the submerged lands are to be treated in these proceedings as the private property of the owner of the uplands to which they are appurtenant, within the meaning of the 5th amendment to the Federal Constitution, and requires no compensation before such taking, appropriation, and use for navigation purposes, whether direct, incidental, or constructive.

(b) The said Chandler-Dunbar Water Power Company possesses no vested right, title or interest, by any grant, permit or license by virtue of which it possesses and owns said waters and the power which is potential therein, as against the public, when exercising its paramount rights pursuant to its powers over navigation.

(c) All of its previously existing revocable permits have been revoked by legal authority, and upon such revocation it is required to vacate the river bed and give way to navigation improvements authorized by law. And Congress did not intend to create evidence

to be used against the Government with any force whatever
271 for the purpose of building up values for water power, by authorizing, as it has, revocable permits to be issued to power companies to develop power at the falls, when their revocation should be ordered by Congress. It is incompetent to so find in effect, such fact and use said instruments as evidential of acquired vested rights against the Government by virtue thereof.

(d) Congress did not intend to award compensation for the usufruct of said waters or the potential water power therein, in order that it may use the same for the purposes previously stated.

(e) Said company has no way of necessity or right of access to its uplands over the Government lands by which they are abutted. The Indian reservation uplands it owns are surrounded by Government lands, and no output from any power plant or factory constructed thereon has a right of way to market over Government lands, and, on the undisputed testimony relating to the consideration for the deed of Jan. 22, 1908, as a matter of law, it has no such way, either of grant, easement, license or necessity to and from said lands over said Government lands surrounding their said Indian reservation lands.

(f) For the further reason that the special findings of fact therein referred to and upon which said value is based numbered 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 40, 41, 42, 48, 59, 60, 61, 62, 63, 64, 66, 67, and 72, in so far as said special findings in the paragraphs indicated pursue the inquiry and purport to finds facts as to navigation necessities, present or prospective, actual or constructive, as correlated
272 to power development conditions, past, present, or prospective, as a basis of award, verdict or finding against the Government for actual or potential power values in excess of navigation necessities which must be compensated for, is a subject not competent for inquiry as a judicial question and the assumption by the court of jurisdiction so to do impinges upon the political legislative powers of Congress under the commerce clause of the Constitution as the exclusive tribunal for the regulation of the use, control, and disposal of said waterway for the purpose of navigation and its incidents, within the shore line of said river, adjacent to the falls, to the international boundary, as exercised by Congress in the enactment of secs. 11 and 12 of the act of Mch. 3, 1909, and the prosecution of the work therein directed; and in the exercise of which power, even to the extent of the entire exclusion of power developments constructed by the Chandler-Dunbar Company or its privies on submerged lands, it may exercise without condemnation of, or compensation for, the asserted title of the Chandler-Dunbar Company to the submerged lands or the waters flowing over the same.

(g) For the Chandler-Dunbar Water Power Company at any time to enter the said river and erect any structures on the submerged lands without the permission of the United States would constitute per se a public nuisance in said river and would be a

misdemeanor within the meaning of sections 9, 10, and 12 of the act of March 3rd, 1899.

(h) As a matter of law, on the undisputed testimony, the purported consideration for the deed of January 22nd, 1908, gave no vested right, title, or interest to the said Chandler-Dunbar Company to a license, way, or easement to cross Government lands for
273 the purpose of granting access to said property to which said water power is appurtenant, and without such way said lands are without value to said company for power development, and no value, as a matter of law, should have been found for said property upon the basis of the asserted consideration for such deed.

(i) In the installation, in part, in said river bed appurtenant to these uplands of public works of the Government primarily intended by Congress as improvements of the methods of navigation on said river in connection with the Great Lakes system, devised and constructed pursuant to the provisions of secs. 11 and 12 of the act of Mch. 3, 1909, if there be from time to time found a quantity of water which may be availed of for developing power, it is competent for the Government to conserve and lease or use the said power from the economic policy of preventing waste of natural resources. Such conservation furnishes no ground for the owner of the barren title to the submerged land to claim, or be entitled to, compensation for any power thus incidentally developed or possible of being so developed in the prosecution of public works primarily intended as improvements to navigation facilities on the river.

The taking and appropriation of the river bed of St. Marys River at the falls having in view the primary object of constructing and operating works therein for the regulation of navigation and an incidental development of power pursuant to said act is not a taking of private property without compensation within the meaning of the fifth amendment, and the Government may use or lease such possible surplus water power so developed by its own works primarily in aid of navigation and apply the proceeds to the Public Treasury.

274 V.

As to that portion which reads as follows: "For the upland, excepting claims 95 and 96 ($65,000, less 7 per cent on account Portage Street subparcel), $60,450," there should be eliminated therefrom the sum of $18,600.00 and the sum of $23,250.00 for the reason that the $18,600.00 item which is added to its value by reason of its availability for use as a factory site in connection with the development of 6,500 h. p. either as a single site or for several smaller factories to use the surplus of 6,500 h. p. not now used in the city, is not an increment of value for which it is entitled to compensation in these proceedings, because, it is based and is dependent on the asserted right of the company to develop said water power, which in law does not exist, for the same reasons as set forth in Paragraph IV, subdivisions "a"

to "i" inclusive, of these exceptions, and which are made a part of this paragraph without their repetition. And for the reason that the $23,250 item, which is added to its value for its desirability for use for lock, canal, and bridge purposes, is not a competent increment of value therein to be awarded as a part of the compensation, because as a matter of law, the governmental necessity to have the said lands for the purpose of erecting thereon canals and locks and other public works in aid of navigation and incident thereto, pursuant to the execution of the power of Congress to regulate interstate and international commerce is not an element of value to be included in making up the amount of compensation due the owner of said lands and is not an increment of value on said property to which the
275 private owner is entitled. Nor can the favorable location of the property, for the installation of canals and locks thereon or a so-called strategic value claimed therein be considered as a factor, for the purpose of enhancing the value of the property to private owner in these proceedings, since such value would be made up of the necessity of the Government to have the property for a public use. Public works herein described are authorized and constructed in the general interests of the people in aid of interstate marine commerce on the Great Lakes and not for the enhancement of the value of private property upon which they are or may be erected.

2. Because there is not a scintilla of evidence in the case that the location of a bridge site on said property is contemplated by anyone having power or authority to execute such a project.

3. Because there is no act of Congress in existence permitting the construction of a bridge, or any treaty or agreement with Great Britain contemplating the construction of a bridge across said river and anchoring its abutments or approaches on these premises.

4. Because no international bridge can be constructed across said river without the approval of Congress.

5. Because such bridge value is mere speculation and not within the zone of probability.

6. Because the findings of facts which purport to establish a basis of value upon those elements, are legally incompetent inquiries. Which paragraphs of the findings of fact so objected to are as follows: Paragraphs 43 and 54.

276 VI.

From the compensation found which the Chandler-Dunbar Company should be awarded for "Claims 95 and 96, $25,000," there should be eliminated the sum of $15,000; that portion of it is made up of two incompetent items (that is to say, $10,000 "by reason of its desirability for lock and canal purposes" and $5,000 * * * "in connection with the land along the rapids if used as a part of the development of 6,500 H. P." * * *), for the reason that, as a matter of law, the finding of fact No. 45, which purports to find the

$10,000 as value for lock and canal purposes is legally incompetent, since governmental necessity to have said lands for the purpose of erecting thereon canals and locks and other public works in aid of navigation and incident thereto, pursuant to the regulation of interstate and international commerce, is not an element of value competent to be included in making up the award of compensation for said claims, nor can their favorable location for the installation of canals and locks be treated as a factor for the purpose of enhancing their value to the private owner, since such value is made up of the necessity of the Government to have the property for public use.

And the said $5,000 for its connected use with land along the rapids for development of 6,500 h. p. for the reason—

(a) That the finding of fact No. 45, which finds such value, is a finding of an incompetent fact in these proceedings.

(b) The Chandler-Dunbar Water Power Company, as against the United States was not the owner of an absolute vested right to develop that much water power or any water power in connection with the land along the rapids at the time of taking for which
277 as against the United States it is entitled to any compensation or treatment as its absolute vested private property having value requiring compensation to it in these proceedings or which attaches as appurtenant to the said lands for that purpose.

(c) The Chandler-Dunbar Water Power Company owns and holds no right, title and interest in and to any water power in the St. Marys River appurtenant to its uplands, and no compensation should have been found for said company on account of its ownership of private land claims 95 and 96 based on the value in connection with the development of any water power, and the exceptions taken herein in Paragraph IV as the basic objection relating to water power, and from which this exception is derived, is made a part hereof as though fully set forth without repetition.

VII.

In the said Finding of Law LI in the court's holding, that it follows as a matter of law that the compensation for the property and rights described in the petition should be fixed as follows: * * * "(e) To the Chandler-Dunbar Water Power Company, * * * for the raw water power, $550,000," petitioner further excepts thereto in this respect, not conceding that the said company should be awarded any compensation for values based upon potential water-power rights; yet, if it be the law that said company should have compensation fixed for water power, the said $550,000 is excessive, it not being legally entitled to that sum, if entitled to any, but to only such an allowance as is found by the extent of their actual development and output reduced to their own premises with
278 their present efficient works actively placing on the market saleable horsepower; and on that basis the full extent, as a

matter of law, to which the said company is entitled to compensation for their present actual development of power is on the basis of the output of four wheels on a nine-foot effective head, in accordance with the basis established in finding of fact No. 37, which determines that four wheels had been set and were in use. That "suitable wheels in the same location and under a nine-foot head would develop 225 horsepower (electrical) each," which for four such wheels is the equivalent of 1,428 theoretical horsepower (see finding of fact No. 12 as to this also), and with its value computed to ascertain their output in accordance with Nos. 14 and 15 of the findings of fact produces a value of $142,800.00 of the present output on their own premises with present installation; and the excess of that up to $550,000.00 should, as a matter of law, be disallowed for potential water power appurtenant to said second description, if it is the law that it is entitled to any compensation for power. Further, in fixing the sum of $550,000.00 as the value of their actual diversion, impounded water, and developments, the inclusion of a portion of their developments made on Government lands to attain a head of 15 feet in order to find an intent to divert, impound, and use 6,500 t. h. p., is as a matter of law, to the extent of about 6 feet extra head as a factor so used in finding that intent, the taking and appropriation of public property to the private use of said company. It is conferring upon it a gratuitous bounty and is totally invalid on its face.

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VIII.

In said Paragraph LI of the conclusions of law, which includes in fixing a part of the value of private land claims 95 and 96 the sum of $5,000 for its connected use in power developments with land along the rapids, also in making up a part of the value of the uplands excepting claims 95 and 96, the sum of $18,600.00 included for use as a factory site in connection with the development of 6,500 h. p., either for a single site or several smaller factories, also in making up the compensation to the owners of Island No. 5 as a portion thereof the sum of $15,000 for strategic purposes, petitioner further excepts to each of said items in this respect, as contained in said conclusion of law, not conceding that the owners are entitled to any compensation for those respective values based upon water-power rights and their incidents or their strategic purposes; yet, if it be the law that the said items so included in fixing such compensation are proper to be considered as elements going to make up the finding in said paragraph for the said uplands and Island #5, if it be determined that the Chandler-Dunbar Water Power Company is not entitled to more than its actual development, as set forth in the preceding paragraph herein, then the values so fixed to said uplands and Island #5 by reason of their suitability for use in power development and for strategic value to thwart power development, then the said values so found

should, as a matter of law, be reduced in the same proportion as the value of the appurtenant water power of the Chandler-Dunbar Company is reduced below $550,000.00.

280 REEVES T. STRICKLAND,
Special Assistant Attorney General.
GRANT FELLOWS, and
WILLIAM K. CLUTE,
Special Assistant U. S. Attorneys.

(Endorsed:) United States District Court Western District of Michigan, Northern Division. In the matter of the petition of the United States to condemn all the lands north of the St. Marys Falls Ship Canal to the international boundary. Exceptions to Paragraph LI of findings of law. Filed May 4, 1912. Chas. L. Fitch, deputy clerk.

281 United States District Court Western District of Michigan, Northern Division.

SATURDAY, MAY 4, 1912.

The court met pursuant to adjournment.

Present: The Honorable Arthur C. Denison, circuit judge, designated.

In the matter of the condemnation of all lands north of St. Marys Falls Ship Canal to the international boundary.

(Former Circuit Court No. 638.)

In this matter the counsel for the United States desiring to file written exceptions to Paragraph LI of the conclusions of law announced and filed by the court, and the United States having presented said exceptions to the court and they having been noted by the court and the same having been argued during the progress of the trial and the United States desiring to reduce the same to writing and to file them:

It is therefore ordered, that the said exceptions to Paragraph LI may be filed as of the 28th of December, 1911, and to take effect as noted and filed after the filing of the court's findings of law on said date, the subject matter of said exceptions all having been fully argued and considered by the court and it having been understood during the progress of the trial that the same might be so reduced to writing and filed.

Approved for entry May 4, 1912.

ARTHUR C. DENISON,
Circuit Judge, designated.

282 *Final award.*

283 THE UNITED STATES OF AMERICA.

The Circuit Court of the United States for the Sixth Circuit, Western district of Michigan, northern division.

FRIDAY, DEC. 29, 1911.

The court met pursuant to adjournment.

Present: The Honorable Arthur C. Denison, circuit judge.

In the matter of the condemnation of all lands and property of every kind and description north of the present Saint Mary's Falls ship canal throughout its entire length and lying between said ship canal and the international boundary at Sault Ste. Marie, in the State of Michigan.

UNITED STATES, PETITIONER, *vs.* CHANDLER-DUNBAR WATER POWER COMPANY, EDISON SAULT Electric Company, International Bridge Company, Michigan-Like Superior Power Company, and St. Mary's Power Company, and the city of Sault Ste. Marie et al., respondents.	No. 638.

This cause having come on regularly to be heard before the court without a jury, a jury having been expressly waived in writing by all the parties, which waivers are on file, the United States appearing by Reeves T. Strickland, Special Assistant Attorney General; Fred C. Wetmore, United States attorney; and Grant Fellows and William K. Clute, special assistant United States attorneys,

284 and the claimed property owners, as set forth in the petition and amendments thereto, appearing by their respective attorneys, as follows:

The Chandler-Dunbar Water Power Company, the Edison Sault Electric Company, Harris T. Dunbar, and William Chandler, by A. B. Eldredge, Moses Hooper, and John H. Goff; the Sault Ste. Marie Bridge Company, by A. B. Eldredge; the city of Sault Ste. Marie, by Sherman T. Handy; the St. Mary's Power Company and Charles M. Brown and Charles D. Warren, as receivers of the Michigan-Lake Superior Power Company, by Stevenson, Carpenter & Butzel; the Real Estate Trust Company of Philadelphia, by A. S. Weill; the Standard Trust Company of New York, by Arthur Webster; the United States Mortgage and Trust Company of New York, by Kleinhans & Knappen; the Michigan-Lake Superior Power Company, by Leo M. Butzel.

And the court having heard the pleadings and having heard the proofs and arguments of counsel, and having duly considered the

pleadings, proofs, and arguments of counsel, and having, at the request of the parties, made and filed its findings of fact and conclusions of law, and having considered all the exceptions to such findings and conclusions, and being fully advised in the premises, doth order, award, and adjudge:

I.

That the ownership in fee-simple absolute by the United States of all lands and property of every kind and description north of the present St. Mary's Falls Ship Canal throughout its
285 entire length and lying between said ship canal and the international boundary line at Sault Ste. Marie, in the State of Michigan, is necessary for the purposes of navigation of said waters and the waters connected therewith as declared by Paragraph 11 of the act of March 3, 1909 (35 Stat. at Large, part 1, pages 820–821).

II.

All of said lands and property of every kind and description are hereby condemned to the public use in fee-simple absolute.

III.

The Secretary of War proceeded with the due filing and publishing, as directed by such act, of a writing giving a full description of all the lands and property of every kind and description thus taken. A full description of the lands and property so taken and hereby condemned is as follows:

First description: All that part of private land claims Nos. 95 and 96, lying north of the northern boundary of the United States canal lands, and described: Beginning at the intersection of the principal meridian of Michigan and the northern boundary of the United States canal lands, being 138.25 feet north of the intersection of the aforesaid principal meridian with the northern boundary of the United States canal grant; thence south 89 degrees 40′ 21″ west, along said boundary of the United States canal lands 327.73 feet, to the southeast corner of said tract, and the initial point of this description; thence north 41 degrees 27′ west 214.96 feet to the north corner of claim No. 96; thence south 48 degrees 33′ west 165 feet; thence south 44 degrees 47′ east 33 feet, to the north corner of claim No. 95; thence south 45 degrees 13′ west 43.46 feet; thence north 89 degrees 40′ 21″ east 274.18 feet, to the place of beginning, containing .56 acre, more or less.

286 Together with all riparian and other rights appurtenant thereto, including all structures and appurtenances of every kind and description, out to the international boundary line; and all rights that may have been reserved in previous deeds conveying a portion of all of these claims to the United States.

Second description: All that tract of land lying north of the northern boundary line of the United States canal lands, including parts of village lot No. 3, Portage Street, and the Indian reservation, the same being more particularly described by courses and distances as follows: Beginning at the intersection of the principal meridian of Michigan with the meander line of St. Marys River, being 59.4 feet north of the northern boundary of the United States canal grant; thence north 71 degrees 39′ east 264 feet; thence north 4 degrees 37′ west 240.9 feet, to the northwest corner of said tract, and the initial point of this description; thence south 4 degrees 37′ east 226.55 feet; thence north 85 degrees 23′ east 375.93 feet; thence north 89 degrees 40′ 21″ east 1,821.5 feet; thence north 18 degrees 39′ west 135.96 feet; thence north 80 degrees 40′ west 109.56 feet; thence south 88 degrees 15′ west 264.66 feet; thence north 84 degrees 41′ west 267.96 feet; thence south 85 degrees 23′ west 198 feet; thence north 89 degrees 54′ west 264.66 feet; thence south 79 degrees 57′ west 265.32 feet; thence north 69 degrees 19′ west 291.72 feet; thence south 87 degrees 56′ west 533.94 feet, to the place of beginning, containing 8.3 acres, more or less.

Together with all riparian and other rights appurtenant thereto, including all structures and appurtenances of every kind and description, out to the international boundary line; and all rights reserved by the Chandler-Dunbar Water Power Company in deed dated January 22, 1908, conveying to the United States of America certain lands north of the St. Marys Falls Canal.

287 Third description: All that tract or parcel of land lying north of the St. Marys Falls Canal designated as Portage Street, and described as follows: Beginning at the intersection of the principal meridian of Michigan and the northern boundary of the United States canal grant; thence north 85 degrees 23′ east 1,202.52 feet along said boundary line to its intersection with the northern line of Portage Street, the initial point of this description; thence north 77 degrees 10′ west 990 feet; thence south 4 degrees 37′ east 69.3 feet; thence south 77 degrees 10′ east 759 feet; thence north 85 degrees 23′ east 219.78 feet, to the place of beginning, containing 1.326 acres, more or less.

Together with all riparian or other rights appurtenant thereto, including all structures and appurtenances of every kind and description, out to the international boundary line.

Fourth description: All that part of village lot No. 3, described as follows: Beginning at the intersection of the principal meridian of Michigan and the meander line of the St. Marys River, according to the so-called Whelpley survey of 1854–1855, being 59.4 feet north of the northern boundary line of the United States canal grant; thence north 71 degrees 39′ east 70.2 feet to the west corner of said tract, and the initial point of this description; thence south 84 degrees 15′ 38″ east 49 feet; thence north 82 degrees 6′ 59″ east 40.7 feet; thence north 14 degrees 3′ east 32.44 feet; thence south 71 degrees 38′ west 102.14 feet, to the place of beginning, containing .032 acre, more or less.

Together with all riparian or other rights appurtenant thereto, including all structures and appurtenances of every kind and description, out to the international boundary line.

Fifth description: All rights to strip 100 feet wide, 50 feet on each side of the center line of the route adopted by Sault Ste. Marie
288 Bridge Company, from the meander line of St. Marys River to a point in the said center line and distant 700 feet, measured on said center line, from the north side of the St. Marys Falls Ship Canal as it existed in 1887. The center line of the route of said company has a course north 14 degrees 3′ east, and passes through a point in the meridian line of the State of Michigan distant 61.85 feet north from the north line of Portage Avenue (formerly known as Canal Street) in the city of Sault Ste. Marie.

Sixth description: A certain island near the foot of St. Marys Falls, on the American side, and known as the island of Chief Shawano, and being the same ceded to Chief Shawano by the United States Government, and designated by Whelpley survey as Island No. 5, and containing .361 acre, more or less.

Together with all riparian or other rights appurtenant thereto, including all structures and appurtenances of every kind and description, out to the international boundary line.

IV.

As and for compensation for the property taken as aforesaid, the court does hereby adjudge and award, for the several descriptions and to the respective owners thereof, the following sums:

To the Chandler-Dunbar Company, as owner in fee-simple and for the above specified first description twenty-five ($25,000.00) thousand dollars.

To the Chandler-Dunbar Company as owner in fee-simple of the second description (excluding therefrom the third description and excluding therefrom the interests of the Edison Sault Electric Company), six hundred twenty-six thousand nine hundred seventy-four ($626,974.00) dollars.

To the Chandler-Dunbar Company as fee-simple owner of an undivided one-half interest in a part of the fourth description and in riparian rights in the fourth description (viz, for its entire
289 interest of every kind in the fourth description), three hundred thirty-eight ($338.00) dollars.

To the owners of the sixth description as hereinafter specified, twenty-one thousand ($21,000.00) dollars.

To the Edison Sault Electric Company as lessee of interests in the second description and to the Standard Trust Company of New York, as its mortgagee, as their respective interests may appear, three hundred thousand ($300,000.00) dollars.

V.

That the United States, at the time of the taking, was and is the owner of the third description so specified, and that no one of the other parties has any interest in such parcel.

That pending this proceeding the remaining fee-simple title to the fourth description and the entire fee-simple title to the fifth description have been, by the owners thereof, conveyed to the United States, wherefore these proceedings are hereby dismissed as against the International Bridge Company.

No right or interest belonging to the Michigan-Lake Superior Power Company has been so taken or is condemned in these proceedings.

5½.

In addition to and as a part of the respective awards heretofore made, simple interest at five per cent per annum from and after January 1st, 1910, shall be computed and paid upon each of such awards until the time of payment, excepting, however, five hundred sixty-six thousand five hundred and twenty-four ($566,524.00) dollars of the award to the Chandler-Dunbar Company on account of description number two, as to which excepted sum interest shall accrue only from the date when the accruing of rentals to the Chandler-Dunbar Company for water power shall cease.

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VI.

The sums hereby awarded shall be paid into the registry of this court, or the District Court, its successor, by the United States, within nine months after the date of this award, or, in case of proceedings to review the same, then within nine months after the final judgment or award which may eventually be made in this matter in this court or in a reviewing court.

VII.

Upon the payment of such sums respectively into the registry of this court, or its successor court, within the time so limited, all the now existing rights, titles, and interests, of every kind and description, held or owned by each and all of the parties respondent hereto, in any of the property or the rights or interests specified in such instrument of taking so filed with the register of deeds, shall vest in fee simple in the United States.

VIII.

There shall be added to and included in the respective awards hereby made and shall be paid into court by the United States in

connection herewith the sum of one per cent thereof, or such other sum as may, at the time of such payment, be the lawful fee of the clerk or register of such court, for receiving and disbursing such sums. All other costs in the proceeding shall be paid by the parties respectively incurring the same.

IX.

The sums so paid into court shall be disbursed on application of the parties in interest, and according to such orders as may from time to time, upon such applications, be made by such court.

291 X.

As to Island No. 5, being the sixth description in such instrument of taking, no judgment is now entered with regard to ownership, but the question of who may be the owner and entitled to such award (whether, on the one hand, the United States, or, on the other hand, the Michigan-Lake Superior Power Company or the St. Marys Power Company) is expressly reserved for further consideration.

XI.

That none of the respondents in this proceeding had, at the time of the taking, any interest in any of the property taken, except as specified and provided for in the previous paragraphs of this judgment.

XII.

The payment into court herein provided for the Chandler-Dunbar Company may, in the discretion of the disbursing officers of the U. S. Treasury, be made in the form of warrants payable to that company.

Approved for entry Dec. 29, 1911.

ARTHUR C. DENISON,
Circuit Judge.

292 *Exceptions by U. S. to final award.*

293 United States District Court for the Western District of Michigan, Northern Division.

(Former Circuit Court No. 638.)

In the matter of the petition of the United States to condemn all the lands north of the St. Marys Falls Ship Canal to the international boundary, &c.

EXCEPTIONS TO FINAL AWARD.

Now comes the United States, petitioner, by Reeves T. Strickland, Special Assistant Attorney General, and Grant Fellows and William

K. Clute, special assistant United States attorneys, and excepts to the final award and judgment rendered herein in the following respects, that is to say:

I.

In Paragraph IV of said award in making up the value at twenty-five thousand dollars for P. L. C's 95 and 96 and being the first description, as compensation to the Chandler-Dunbar Water Power Company, petitioner excepts to the inclusion therein and as a part of its value of the sum of ten thousand dollars for lock and canal purposes pursuant to that part of finding of fact No. 45 as reads as follows: * * * "By reason of its desirability for lock and canal purposes an additional $10,000" * * * because as a matter
294 of law the governmental necessity to have the said lands for the purpose of erecting thereon canals and locks and other public works in aid of navigation and incident thereto pursuant to the execution of the power of Congress to regulate interstate and international commerce, is not an element of value to be included in making up the amount of compensation due the owner of said lands and is not an increment of value in said property to which the private owner is entitled. Nor can the favorable location of the property for the installation of canals and locks thereon or a so-called strategic value claimed therein be considered as a factor for the purpose of enhancing the value of the property to private owners in these proceedings, since such value would be made up of the necessity of the Government to have the property for a public use. Public works herein described are authorized and constructed in the general interests of the people in aid of interstate marine commerce on the Great Lakes, and not for the enhancement of the value of private property upon which they are or may be erected.

II.

In Paragraph IV of said award in making up the value of twenty-five thousand dollars for P. I. C's 95 and 96 as compensation to the Chandler-Dunbar Water Power Company, petitioner excepts to the inclusion therein and as a part of its value of the sum of five thousand dollars incident to a power development pursuant to that part of finding of fact No. 45 as reads as follows: * * * "In connection with the land along the rapids, if used as a part of the developments of 6,500 horsepower, an additional value of five thousand dollars," * * * because—
295 (a) There is no fall appurtenant to said lands (P. L. C.'s 95 and 96) from which any commercial water power can be developed.

(b) The said Chandler Dunbar Water Power Company as against the United States was not the owner of an absolute vested right to develop that much water power or any water power in connection with the land along the rapids at the time of taking for which as

against the United States it is entitled to any compensation or treatment as its absolute vested private property having value requiring compensation to it in these proceedings or which attaches as appurtenant to the said lands for that purpose.

(c) The Chandler Dunbar Water Power Company owns and holds no right, title, and interest in and to any water power in the St. Marys River appurtenant to its uplands, and no award should have been made to said company on account of its ownership of P. L. C.'s 95 and 96 on account of value in connection with the development of any water power for the further reasons more fully stated in the exceptions taken and set forth in Paragraph IV of these exceptions relating to the subject of water power in said river and the right of said company to develop the same, and therefore said lands as a matter of law have no value for such connected use.

III.

The award of $25,000.00 for P. L. C.'s 95 and 96 should be restricted to the sum of $10,000.00 found as its base value by
296 finding of fact XLV, where it read as follows: * * * "I fix the value of these two claims and the dump and fill, made or which should have been made, all as one parcel, as follows: For general wharfage, dock, and warehouse purposes disconnected with the development of power in the rapids, and not in association with the land along the rapids (and as the base value), $10,000." * * * And petitioner excepts to the award of the excess over that for said premises.

IV.

In Paragraph IV of said award, in making up the value of second description at six hundred and twenty-six thousand nine hundred and seventy-four dollars (excluding therefrom the third description and excluding therefrom the interests of the Edison Sault Electric Company), petitioner excepts to the inclusion therein as a part of its value the sum of five hundred and fifty thousand dollars for water power appurtenant to the uplands, which is included pursuant to that portion of the findings of fact as are numbered 14, 15, 40, 41, and 42, because the said Chandler-Dunbar Water Power Company was not as a matter of law as against the United States the owner of an absolute vested right of that amount of water power as so found, or any other water power in the St. Marys River, at the time of taking for which it is entitled to any compensation or treatment as its absolute vested private property having value requiring compensation to it in these proceedings for the following reasons:

(a) The Chandler Dunbar Water Power Company owns and holds the title to such submerged lands as are appurtenant to its uplands as trustee for the use and benefit of the public,
297 which trust is indefeasible; that the beneficial right, title, and interest of the public in said submerged lands for which

said indefeasible trust subsists is the public's navigation right with all its incidents, which right with all its incidents upon these waters and in and to said submerged lands is a part of the public domain of the United States.

(b) All of the submerged lands where the said water power physically exists has been appropriated by the United States under section 11 of the act of March 3rd, 1909, for the purpose of regulating and improving navigation on said St. Marys River and erecting structures upon the submerged lands for the purpose of improving and facilitating the navigation of the Great Lakes system of which the said waters of the St. Marys River is a constituent part.

(c) The rights of the people of the United States in the exercise of its dominion over the waters of said river and the improving the same for its navigation, extends here from the southerly main shore of the river to the international boundary line, and throughout the whole extent of the same.

(d) It is a paramount right of the United States to so take, appropriate, control, and use said submerged lands, which right of taking and appropriating it may exercise through Congress at such time and by such ways and means as the discretion of Congress directs. That it may occupy the bed of the stream for its structures in direct aid of navigation or as incidental thereto or leave the whole river open waters and permit no power developments to be
298 erected therein and the exercise of such discretion in the regulation of navigation in such ways and means as Congress sees fit to use, is not subject to control, limitation, or interference by the discretion of the Federal judiciary. It is a sovereign legislative prerogative of the people over their public domain delegated by the people exclusively to Congress in the third clause of art. 1, sec. 8, of the Constitution giving it authority to regulate interstate and international commerce.

(e) The said water power so found to be the absolute private property of the Chandler-Dunbar Water Power Company, for which the sum of five hundred and fifty thousand dollars is awarded, is not to be treated in these proceedings as private property within the meaning of the fifth amendment to the Federal Constitution requiring compensation before its taking, appropriation, and use.

(f) At the time of taking, the Chandler-Dunbar Water Power Company had no grant, permit, or license from the United States giving it a vested right, title, or interest in and to the bed of the stream or the usufruct of the waters for the purpose of entering the river and erecting power developments therein.

(g) All its previously existing permits have been revoked by the Secretary of War before the filing of the petition herein: all of said permits were revocable on their face at the pleasure of the Secretary of War and conferred no vested right, title, or interest in and to said company of the public navigation right and dominion in said river, or adverse thereto, or any right to compensation by reason of their revocation.

(h) Section 11 of the said act of March 3rd, 1909, on its face revoked all of said permits previously existing.

299 (i) For the Chandler-Dunbar Water Power Company at any time to enter the said river and erect any structures on the submerged lands without the permission of the United States would constitute per se a public nuisance in said river and would be a misdemeanor within the meaning of sections 9, 10, and 12 of the act of March 3rd, 1899.

(j) The said premises to which said 6,500 theoretical horse power is physically appurtenant is abutted by Government lands on all sides, except facing the river, and the said company has no way of necessity across the said Government lands, and without such way said lands are without value for power development by any private shore owner.

(k) As a matter of law, on the undisputed testimony, the purported consideration for the deed of January 22nd, 1908, gave no vested right, title, or interest to the said Chandler-Dunbar Company to a license, way, or easement to cross Government lands for the purpose of gaining access to said property to which said water power is appurtenant, and without such way said lands are without value to said company for power developments.

(l) The barren title of the said submerged lands incumbered by such indefeasible trust for the benefit of the public as a matter of law is of negligible value when the dominant estate of the public in said trust is exercised as it has been here by the action of Congress.

(m) Congress did not intend to award compensation for the usufruct of said waters or the potential water power therein.

(n) In the installation, in part, in said river bed appurtenant to these uplands, of public works of the Government

300 primarily intended by Congress as improvements of the methods of navigation on said river in connection with the Great Lakes system, devised and constructed pursuant to the provisions of secs. 11 and 12 of the act of Mch. 3, 1909, if there be, from time to time found a quantity of water which may be availed of for developing power, it is competent for the Government to conserve, and lease or use the said power, from the economic policy of preventing waste of natural resources. Such conservation furnishes no ground for the owner of the barren title to the submerged land to claim, or be entitled to, compensation for any power thus incidentally developed or possible of being so developed.

The taking and appropriation of the river bed of St. Marys River at the Falls having in view the primary object of constructing and operating works therein for the regulation of navigation and an incidental development of power pursuant to said act is not a taking of private property without compensation within the meaning of the fifth amendment, and the Government may use or lease such possible surplus water power so developed by its own works primarily in aid of navigation and apply the proceeds to the public treasury.

V.

In Paragraph IV of said award in making up the value at six hundred and twenty-six thousand nine hundred and seventy-four dollars for the second description (excluding therefrom the third description and excluding therefrom the interests of the Edison Sault Electric Company) petitioner excepts to the inclusion therein as a part of its value the sum of eight thousand and six
301 hundred dollars, pursuant to that part of finding of fact No. 43 (taking 93% of the same) as reads as follows: * * * "For use as a factory site in connection with the development of 6,500 horse power, either as a single site or for several smaller factories to use the surplus of 6,500 horse power not now used in the city, an additional value of $20,000," * * * because the said Chandler-Dunbar Water Power Company was not, as a matter of law, as against the United States, the owner of an absolute vested right of that amount of water power in the St. Marys River at the time of taking, for which it is entitled to any compensation or treatment as its absolute vested private property having value requiring compensation to it in these proceedings for the following reasons:

(a) The Chandler-Dunbar Water Power Company owns and holds the title to such submerged lands as are appurtenant to its uplands as trustee for the use and benefit of the public, which trust is indefeasible; that the beneficial right, title, and interest of the public in said submerged lands for which said indefeasible trust subsists is the public's navigation right with all its incidents, which right with all its incidents upon these waters and in and to said submerged lands is a part of the public domain of the United States.

(b) All of the submerged lands where the said water power physically exists has been appropriated by the United States under section 11 of the act of March 3rd, 1909, for the purpose of regulating and improving navigation on said St. Marys River and erecting structures upon the submerged lands for the purpose of improving and facilitating the navigation of the Great Lakes system, of which the said waters of the St. Marys River is a constituent part.

302 (c) The rights of the people of the United States in the exercise of its dominion over the waters of said river and the improving the same for its navigation extends here from the southerly main shore of the river to the international boundary line and throughout the whole extent of the same.

(d) It is a paramount right of the United States to so take, appropriate, control, and use said submerged lands, which right of taking and appropriating it may exercise through Congress at such time and by such ways and means as the discretion of Congress directs. That it may occupy the bed of the stream for its structures in direct aid of navigation or as incidental thereto or leave the whole river open waters and permit no power developments to be erected therein, and the exercise of such discretion in the regulation of navigation in such ways and means as Congress sees fit to use is not

subject to control or interference by the discretion of the Federal judiciary. It is a sovereign legislative prerogative of the people over their public domain delegated by the people exclusively to Congress in clause 3rd, art. 1, section 8 of the Constitution, giving it authority to regulate interstate and international commerce.

(e) The said water power so found to be the absolute private property of the Chandler Dunbar Water Power Company, for which the sum of five hundred and fifty thousand dollars is awarded, is not to be treated in these proceedings as private property within the meaning of the fifth amendment to the Federal Constitution requiring compensation before its taking, appropriation, and use.

303 (f) At the time of taking the Chandler-Dunbar Water Power Company had no grant, permit, or license from the United States giving it a vested right, title, or interest in and to the bed of the stream or the usufruct of the waters for the purpose of entering the river and erecting power developments therein.

(g) All its previously existing permits have been revoked by the Secretary of War before the filing of the petition herein; all of said permits were revocable on their face at the pleasure of the Secretary of War and conferred no vested right, title, or interest in and to said company of the public navigation right and dominion in said river, or adverse thereto, or any right to compensation by reason of their revocation.

(h) Section 11 of the said act of March 3rd, 1909, on its face revoked all of said premises previously existing.

(i) For the Chandler-Dunbar Water Power Company at any time to enter the said river and erect any structures on the submerged lands without the permission of the United States would constitute per se a public nuisance in said river and would be a misdemeanor within the meaning of sections 9, 10, and 12 of the act of March 3rd, 1899.

(j) The said premises to which said 6,500 theoretical horsepower is physically appurtenant is abutted by Government lands on all sides, except facing the river, and the said company has no way of necessity across the said Government lands, and without such way said lands are without value for power development.

304 (k) As a matter of law, on the undisputed testimony, the purported consideration for the deed of January 22nd, 1908, gave no vested right, title, or interest to the said Chandler-Dunbar Company to a license, way, or easement to cross Government lands for the purpose of gaining access to said property to which said water power is appurtenant, and without such way said lands are without value to said company for power development.

(l) The barren fee simple title to the said submerged lands incumbered by such indefeasible trust for the benefit of the public as a matter of law is of negligible value when the dominant estate of the public in said trust is exercised as it has been here by the action of Congress.

(m) Congress did not intend to award compensation for the usufruct of said waters or the potential water power therein.

(n) In the installation, in part, in said river bed appurtenant to these uplands, of public works of the Government primarily intended by Congress as improvements of the methods of navigation on said river in connection with the Great Lakes system, devised and constructed pursuant to the provisions of secs. 11 and 12 of the act of Mch. 3, 1909, if there be, from time to time, found a quantity of water which may be availed of for developing power it is competent for the Government to conserve, and lease or use the said power, from the economic policy of preventing waste of natural resources. Such conservation furnishes no ground for the owner of the barren title to the submerged land to claim, or be entitled to, compensation for any power thus incidentally developed or possible of being so developed.

305 The taking and appropriation of the river bed of St. Marys River at the falls having in view the primary object of constructing and operating works therein for the regulation of navigation and an incidental development of power pursuant to said act is not a taking of private property, without compensation within the meaning of the 5th amendment, and the Government may use or lease such possible surplus water power so developed by its own works primarily in aid of navigation, and apply the proceeds to the Public Treasury.

VI.

In Paragraph IV of the award in making up the value at six hundred and twenty-six thousand nine hundred and seventy-four dollars for the second description (excluding therefrom the third description and excluding therefrom the interests of the Edison Sault Electric Company), petitioner excepts to the inclusion therein as a part of its value the sum of $23,250.00 for the desirability of such premises for use for lock and canal or bridge purpose, pursuant to that part of finding No. 43 (which is 93% of the same) as reads as follows: * * * "It also has value in connection with the probability that it would be needed for lock and canal or bridge purposes." * * * "The fact that it was desirable for use for lock and canal or bridge purposes gives it an additional value element, in each case, of $25,000," * * * because as a matter of law the governmental necessity to have the said lands for the purpose of erecting thereon canals and locks and other public works in aid of navigation and incident thereto, pursuant to the execution of the power of Congress to regulate interstate and international
306 commerce is not an element of value to be included in making up the amount of compensation due the owner of said lands and is not an increment of value on said property to which the private owner is entitled. Nor can the favorable location of the property,

for the installation of canals and locks thereon or a so-called strategic value claimed therein be considered as a factor, for the purpose of enhancing the value of the property to private owner in these proceedings, since such value would be made up of the necessity of the Government to have the property for a public use. Public works herein described are authorized and constructed in the general interests of the people in aid of interstate marine commerce on the Great Lakes and not for the enhancement of the value of private property upon which they are or may be erected.

2. Because there is not a scintilla of evidence in the case that the location of a bridge site on said property is contemplated by anyone having power or authority to execute such a project.

3. Because there is no act of Congress in existence permitting the construction of a bridge, or any treaty or agreement with Great Britain contemplating the construction of a bridge across said river and anchoring its abutments or approaches on these premises.

4. Because no international bridge can be constructed across said river without the approval of Congress.

5. Because such bridge value is mere speculation and not within the zone of probability.

307 VII.

In Paragraph IV of said award in making up the value at six hundred and twenty-six thousand nine hundred and seventy-four dollars of the second description (after deducting the exclued portions) to the inclusion therein of $550,000.00 for the value of 6,500 t. h. p., petitioner further excepts thereto in this respect; not conceding that the said company is entitled to any compensation for values based upon potential water-power rights, yet if it be the law that the said company is entitled to an award for water power the said $550,000.00 is excessive, the said company not being legally entitled to that sum, if entitled to any, but to only such an allowance as is found by the extent of their actual development and output reduced to their own premises, with their present efficient works, actively placing on the market saleable horsepower; and on that basis the full extent, as a matter of law, to which the said company is entitled to compensation for their present actual development of power is on the basis of the output of four wheels on a nine-foot effective head in accordance with the basis established in finding of fact No. 37, which determines that four wheels had been set and were in use. That "suitable wheels in the same location and under a 9-foot head would develop 225 horsepower (electrical) each," which, for four such wheels, is the equivalent of 1,428 theoretical horsepower (see finding of fact No. 12 as to this also), and with its value computed to ascertain their output, in accordance with Nos. 14 and 15 of the findings of fact, produces a value of $142,800.00 of the present output on their own premises with present installation; and

the excess of that up to $550,000.00 should, as a matter of law,
308 be disallowed for potential water power, appurtenant to said second description, if it is the law that it is entitled to any compensation for power. Further, in fixing the sum of $550,000.00 as the value of their actual diversion, impounded water, and developments, the inclusion of a portion of their developments made on Government lands to attain a head of 15 feet in order to find an intent to divert, impound, and use 6,500 t. h. p. is, as a matter of law, to the extent of about 6 feet extra head as a factor so used in finding that intent, the taking and appropriation of public property to the private use of said company. It is conferring upon it a gratuitous bounty and is totally invalid on its face.

VIII.

In Paragraph IV of the said award which makes up to the Chandler-Dunbar Water Power Company the sum of ---------- $652,312.00
there is an excess of ---------- 606,850.00
awarded to it, and as a matter of law said award should be reduced to the sum of ---------- 45,462.00
as the value and just compensation for the interest of the said company in the first, second, and fourth descriptions, and petitioner excepts to the excess, and the value of said premises should have been fixed at that sum as their fair market value and have eliminated therefrom water power, bridge, canal, and lock purposes and value for single or several factory sites in connection with any water-power development for the reasons previously stated.

IX.

In Paragraph IV of said award, in making up the value of Island No. 5 at twenty-one thousand dollars as a part of the value
309 of the sixth description, petitioner excepts to the inclusion therein as compensation to the owners thereof, pursuant to finding of fact No. 70, * * * "an additional value by reason of its special suitability for lock and canal purposes, five thousand dollars," * * * because, as a matter of law, the governmental necessity to have the said lands for the purpose of erecting thereon canals and locks and other public works in aid of navigation and incident thereto, pursuant to the execution of the power of Congress to regulate interstate and international commerce, is not an element of value to be included in making up the amount of compensation due the owner for said lands and is not an increment of value of said property to which the private owner is entitled. Nor can the favorable location of the property for the installation of canals and locks thereon or a so-called strategic value claimed therein be considered as a factor for the purpose of enhancing the value of the property to private owner in these proceedings, since such value

would be made up of the necessity of the Government to have the property for a public use. Public works herein described are authorized and constructed in the general interests of the people in aid of interstate marine commerce on the Great Lakes and not for the enhancement of the value of private property upon which they are or may be erected.

X.

In Paragraph IV of said award, in making up the value at twenty-one thousand dollars for Island No. 5 as compensation to the owners thereof, petitioner excepts to the inclusion therein as a part of
310 its value of the sum of $15,000 as strategic value pursuant to that portion of findings of fact No. 70 as reads as follows: * * * "the value of Island No. 5 is as follows: * * * (b) As a strategic value growing out of the extent to which it may control or blosk the most available development by upstream owners, $15,000," * * * for the reason that as a matter of law said so-called strategic value is not an increment of value competent to be awarded to the owners thereof as a part of the value of said premises as against the United States in these proceedings for the following reasons:

Because there is no appurtenant potential water power of commercial value attaching to Island No. 5, there being but two feet fall, and its value for that purpose is negligible.

Because the premises next westerly from the said island on the main shore and also the shore lands on the south side of the channel between said island and the main shore, is the property of the United States, and there is no probability that any power company could acquire the said Government lands for the purpose of developing any water power thereon in connection with Island No. 5.

Because no upper private riparian owner is affected by any strategic factor in connection with said island.

Further, because if any private owner owned Island No. 5 it would not, as a matter of law, as against the United States be the owner of any riparian right that it could manipulate to thwart the Chandler-Dunbar Water Power Company or any other of the upstream
311 riparian owners in the development of power on their own premises, for the reason that the said upper riparian owners possess no rights to develop the said potential water power in the river for the reasons set forth in Paragraph IV of these exceptions.

XI.

Petitioner excepts to any value attaching to Island No. 5 for any purpose of these proceedings in excess of its base value pursuant to finding of fact No. 70, which reads: * * * "The value of Island No. 5 is as follows: (a) As a base value for general purposes, as for a cottage or a fishing station, $1,000.00." * * *

XII.

In paragraph 4 of the award in fixing a part of the value of private land claims 95 and 96 at five thousand dollars for its connected use in power developments with land along the rapids; also in making up a part of the value of the second description (omitting excluded portions) the sum of $18,600, for use as a factory site in connection with the development of 6,500 h. p., either for a single site or several smaller factories; also in paragraph 4 making up the value to the owners of Island No. 5 as a portion thereof, the sum of $15,000 for strategic purposes, petitioner further excepts to each of said items in this respect; not conceding that the owners thereof are entitled to any compensation for those respective values based upon water-power rights and their incidents, or strategic purposes, yet, if it be law that the said values are proper to be considered as elements going to make up an award for the said uplands and Island No. 5, if it be determined that the said Chandler-
312 Dunbar Water Power Company is not entitled to more than its actual development, as set forth in the exceptions to the award No. 7 herein, then the values so fixed to the said uplands and island, by reason of their suitability for use in power development and for strategic value to thwart power development, then the said values so found should as a matter of law be reduced in the same proportion as the value of the appurtenant water power of the Chandler-Dunbar Company is reduced below $550,000.00.

XIII.

In Paragraph V½ of said award petitioner excepts to the addition of interest to the awards for such values as theretofore determined by the finding of facts because the United States is not liable to pay interest upon the award it may be required to pay for said premises. The total award at the time it is made should include every legal factor of compensation to date of the award and no interest accrues thereon after the date of the award.

REEVES T. STRICKLAND,
Special Assistant Attorney General.
GRANT FELLOWS and
WM. K. CLUTE,
Special Assistant U. S. Attorneys.

313 (Endorsed:) United States District Court, Western District of Michigan, Northern Division. (Former Circuit Court No. 638.) In the matter of the petition of the United States to condemn all the lands north of the St. Marys Falls Ship Canal to the international boundary, &c. Exceptions to the final award. Reeves T. Strickland, Grant Fellows, Wm. K. Clute, attorneys for petitioner. Filed May 4, 1912, as of Dec. 27, 1911. Chas. L. Fitch, deputy clerk.

314 United States District Court, Western District of Michigan, Northern Division.

SATURDAY, MAY 4, 1912.

The court met pursuant to adjournment.
Present, the honorable Arthur C. Denison, circuit judge, designated.

(Former Circuit Court No. 638.)

In the matter of the condemnation of all lands north of the St. Marys Falls Ship Canal to the international boundary.

In this cause the United States desiring to file exception to the final award, and the said exceptions having been presented to and noted by the court, and the grounds of such exceptions having been fully argued before the court during the progress of this trial, and counsel being allowed to reduce said exceptions to writing and to file the same,

It is ordered that the exceptions of the United States to the final award may be filed as of the 29th of December, 1911, after the filing and entry of the final award.

Approved for entry May 4, 1912.

ARTHUR C. DENISON,
Circuit Judge, designated.

315 In the District Court of the United States for the Western District of Michigan, Northern Division.

TUESDAY, MARCH 26, 1912.

The court met pursuant to adjournment.
Present, the honorable Arthur C. Denison, circuit judge.

UNITED STATES OF AMERICA, PETITIONER, *vs.* CHANDLER-DUNBAR COMPANY ET AL., RESPONDENTS.	No. 638 (former Circuit Court number).

In the matter of the condemnation of all the lands north of the St. Marys Falls Ship Canal to the international boundary.

In this cause the public interest, in my judgment, requires that Arthur C. Denison, who is one of the circuit judges of this circuit, and who as district judge presided at the trial of this cause, should continue to have charge thereof in the matter of settling a bill of exceptions and in all proceedings incidental thereto or connected therewith.

Therefore I, as senior circuit judge of the Sixth Judicial Circuit, hereby designate and appoint Arthur C. Denison, one of the circuit

judges, to hold the above-named District Court in the matter of and in all things pertaining to or connected with the settlement of the bill of exceptions in the above entitled cause.

Dated March 26, 1912.

J. W. WARRINGTON,
Senior Circuit Judge, Sixth Judicial Circuit.

316 *Soo condemnation—Bill of exceptions.*

Filed May 11, 1912. Chas. J. Potter, clerk, by Fred J. Schutcheis, deputy.

United States District Court, Western District of Michigan, Northern Division.

(Former Circuit Court No. 638.)

In the matter of the condemnation of all the lands north of the St. Marys Falls Canal to the international boundary.

In this matter the United States Mortgage and Trust Company, by its attorneys, waives service upon it of a proposed bill of exceptions by any of the other parties in this proceeding and consents that the court may settle such bill or bills of exception as the parties present in this proceeding without further notice.

Dated this 18th day of April, 1912.

KLEMHAUS & KNAPPER,
Attorneys for U. S. Mortgage & Trust Co.

317 United States District Court, Western District of Michigan, Northern Division.

(Former Circuit Court No. 638.)

In the matter of the condemnation of all the lands north of the St. Marys Falls Canal to the international boundary.

WESTERN DISTRICT OF MICHIGAN, *Southern Division, ss:*

WM. K. CLUTE, being duly sworn, deposes and says that he is one of the attorneys for the United States, petitioner, in this proceeding; that on the 10th and 18th days of April, 1912, he served a copy of the proposed bill of exceptions of the United States and a proposed substitute for the proposed bills of exceptions of the Chandler-Dunbar Water Power Co. in this proceeding upon the attorneys for the respective parties as follows:

Upon John H. Goff, attorney for the Chandler-Dunbar Water Power Company, on the 10th day of April, 1912; upon Stevenson, Carpenter & Butzel, attorneys for the St. Marys Power Co., and upon Clarence M. Brown and Charles D. Warren, as receivers of

the Michigan Lake Superior Company; upon Leo M. Butzel, attorney for the Michigan Lake Superior Power Company, and upon A. S. Weill, attorney for the Real Estate Trust Co., trustee, on the 18th day of April, 1912, by inclosing a copy of said bill of exceptions, together with a notice, a copy of which is hereto annexed, in a sealed enclosure, addressing the respective packages as follows:

318 To John H. Goff, Union Trust Bldg., Detroit, Mich.; to Leo M. Butzel, Ford Bldg., Detroit, Mich.; to A. S. Weill, 1418 Land Title Bldg., Philadelphia, Pa.

That upon each of said packages were posted a franked envelope of the U. S. attorney, none of them requiring any postage, and that the said packages, so sealed, addressed, and franked, were deposited in the U. S. mails in the post office in the city of Grand Rapids, Michigan, as follows: A package to John H. Goff on the 10th day of April, 1912; the package for Leo M. Butzel and A. S. Weill on the 18th day of April, 1912.

Deponent further says that the service upon Stevenson, Carpenter & Butzel, attorneys aforesaid, was made by the same service as upon Leo M. Butzel, the said Leo M. Butzel being one of the members of said firm.

Deponent further says that on the 18th day of April, 1912, a second copy of the bill of exceptions was sent by mail to John H. Goff, and that deponent is informed by correspondence that said Goff and Hooper each have a copy.

And further deponent saith not.

WM. K. CLUTE.

Subscribed and sworn to before me this 18th day of April, 1912.

GETA V. GODWIN,
Notary Public, Kent Co., Mich.

My commission expires Apr. 26, 1915.

319 United States District Court for the Western District of Michigan, Northern Division.

(Former Circuit Court No. 638.)

In the matter of the condemnation of all the lands north of the St. Marys Falls Ship Canal to the international boundary.

To—

JOHN H. GOFF, Union Trust Co. Bldg., Detroit, Mich.,
Attorney for Chandler-Dunbar Water Power Company.
MOSES HOOPER, Oshkosh, Wisconsin, *of Counsel.*
STEVENSON, CARPENTER & BUTZEL, Ford Bldg., Detroit, Mich.,
Attorneys for St. Marys Power Company.
CLARENCE M. BROWN and CHARLES D. WARREN,
As receivers of the Michigan Lake Superior Power Company.

LEO M. BUTZEL, Ford Bldg., Detroit, Mich.,
Attorney for Michigan Lake Superior Power Co.
A. S. WEILL, 1418 Land Title Bldg., Philadelphia, Pa.,
Attorney for the Real Estate Trust Co., Trustee.
KLEINHANS & KNAPPEN, Mich. Trust Bldg., Grand Rapids, Mich.,
Attorneys for United States Mortgage & Trust Co.

Please take notice that annexed hereto is a true copy of the proposed bill of exceptions of the United States in the above-entitled matter. This also constitutes a proposed substitute for the proposed bill of exceptions of the Chandler-Dunbar Water Power Company.

Application will be made by the United States to
320 honorable Arthur C. Denison, circuit judge, designated for the settlement and signature of the same as such on the 25th day of April, A. D. 1912, at 10 o'clock in the forenoon, or as soon thereafter as counsel can be heard, at the judge's chambers United States courts, in the city of Grand Rapids, Michigan.

Dated this 10th day of April, 1912.

GRANT FELLOWS and WM. K. CLUTE,
Special Assistant U. S. Attorneys.

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328 In the District (formerly Circuit) Court of the United States for the Western District of Michigan, Northern Division.

UNITED STATES, PETITIONER,
vs.
CHANDLER-DUNBAR WATER POWER COMPANY, IMPLEADED with the city of Sault Ste. Marie; the Michigan Lake Superior Power Company, Charles M. Brown and Charles D. Warren, as receivers of the Michigan Lake Superior Power Company; the Real Estate Trust Company of Philadelphia; the United States Mortgage & Trust Company of New York; the St. Marys Power Company, et al., respondents.

PROPOSED BILL OF EXCEPTIONS.

At a session of the Circuit Court of the United States for the Western District of Michigan, Northern Division, commencing at the court house of said court at the city of Marquette, on the 21st day of February, 1911, and continuing at the city of Grand Rapids
329 up to and including the 30th day of December, 1911.

Present, Honorable Arthur C. Denison, district judge.

Appeared as well the petitioner, the United States, by Fred C. Wetmore, United States district attorney for the Western District of Michigan; R. T. Strickland, Assistant Attorney General; and William K. Clute and Grant Fellows, special assistants to the district attorney of the United States for the Western District of Michigan; and as well the Chandler-Dunbar Water Power Company, respondent and defendant, by Arch B. Eldridge and John H. Goff, its attorneys, and Moses Hooper, its counsel; and Stevenson, Carpenter & Butzel, attorneys for St. Marys Power Company, and for Clarence M. Brown and Charles D. Warren as receivers of the Michigan Lake Superior Power Company; the city of Sault Ste. Marie, by Sherman T. Handy, its attorney; and Leo M. Butzel, attorney for the Michigan Lake Superior Power Company; and Arthur Webster, for the Standard Trust Company; and Arch B. Eldridge, for the Edison Sault Electric Company.

The hearing upon the petition of the United States for the condemnation of the lands described in said petition came on to be heard, and to maintain the petition the petitioner on its part called as a witness LEWIS G. STUART, who, being duly sworn, testified as follows:

I reside in Grand Rapids and am a member of the Grand Rapids Historical Society and the State Historical Society, and for some time have been a student of early Michigan history. I am familiar with the books and authorities which treat of events in the history of Michigan. Volume 50 of the Jesuit Relations is the source of all information we have concerning the very early history. Turn-
330 ing to page 265 of that book there is a chapter pertaining to Sault Ste. Marie and the St. Marys River.

Mr. HOOPER. May I ask to what conclusion does this tend?

Mr. CLUTE. The conclusion that this line of testimony will tend is to show that St. Marys River is a continuous public navigable waterway from Lake Superior to Lake Huron.

Thereupon it was conceded in open court that the St. Marys River is a navigable river and a part of the Great Lakes system, and none of the respondents contended to the contrary.

Thereupon the United States produced, offered, and the same was received in evidence, a certified copy of the field notes of the Whelpley survey of the village of Sault Ste. Marie. Among such notes was the following referring to the north boundary of village lot number three, to wit, "Thence north 77 degrees 10 minutes west along the south side of Portage Street to the right bank of River St. Mary."

The petitioner also produced a certified copy of the map of the Whelpley survey, which was marked "Plaintiff's Exhibit 7" and received in evidence.

The petitioner also offered certified copies of all instruments of record having reference to the premises described in the petition (Exhibits 9, 10, 11, 12, 13, 14, 15). Among said exhibits is a quit-claim deed from the Chandler-Dunbar Water Power Company to the United States of America, bearing date January 22nd, 1908, which is hereto attached, marked "Plaintiff's Exhibit 11 (a)"
331 and made a part hereof. Among said exhibits was also a notice lis pendens of a suit wherein the Chandler-Dunbar Water Power Company is complainant and the Michigan Lake Superior Power Company is defendant, which suit is pending in the circuit court for the county of Marquette, in the State of Michigan, in chancery, and which cause was an action brought by the respondent, the Chandler-Dunbar Water Power Company, by bill in equity to restrain the Michigan Lake Superior Power Company from diverting from the River St. Mary, through its hydraulic canal, the water appurtenant to the lands of this respondent. The part of the bill of complaint material herein is as follows:

"Such canal, so far as built, is of a width and depth to give a cross section below the water line of about 4,500 feet, and is of a size and capacity to carry about one-half of the whole flow of the St. Mary's River at the ordinary low-water stage thereof at said point, to wit, about 1,800,000 cubic feet of water per minute with flow at the velocity calculated for its flow in said canal by the defendant. Only about one-tenth of the work necessary to the digging and completion of said canal remains to be done. The said defendant

threatens to, and gives out that it will, and as your orator verily believes, unless restrained by this court, will complete said canal at such capacity, and will divert that part of the water of the St. Mary's River appurtenant to the south shore thereof and to the lands of your orator upon said south shore through said canal from said river at a point above your orator's said land, and carry same around your orator's said land, and return the same to said river at a point below your orator's said land.

"Such diversion will render valueless the present hydraulic works of your orator, and such hydraulic works as your orator may build and construct in addition thereto for the further use of the waters of said river appurtenant to the lands of your orator; and will cause great and irreparable damage to your orator by destroying the value of the said present hydraulic works, and by withdrawing from the lands of your orator the remainder of the flow of the waters of said river appurtenant to said lands."

The reply to the answer to such bill of complaint, so far as the same is material here, is as follows:

"Answering subdivision of Paragraph XVII of said answer, complainant admits that it has not threatened lawsuits against the defendant, nor opposed the construction of its canal, for the reason that, as the fact is, it was advised by the defendant's officers, before any active operations of any kind had been commenced, and as
332 early as 1895, that the said canal would not in any manner interfere with the property or rights of this complainant; that for more than three years prior to the time when the said Clergue and his associates purchased the assets of the St. Mary's Falls Water Power Company the complainant had been actively and openly engaged in developing water power on its land and in selling power in the city of Sault Ste. Marie. In 1897 complainant had plans and specifications prepared to develop, in connection with its lands, 35,000 horsepower, the development of which would require the use of half of the flow of the river at ordinary stages; and the preparation of these plans was then brought to the knowledge of the officers and agents of the defendant company and of the Lake Superior Power Company, and was well known by them.

Early in 1898, and before work was commenced by the defendant upon its canal, complainant was advised by the engineer of defendant that the waters which defendant proposed to use in its canal were the waters appurtenant to the Canadian shore. Complainant therefore denies that by any act or omission of complainant or its officers the defendant was led to believe that the complainant either would consent, or would not object, to the diversion of the waters appurtenant to its lands into the said canal of the defendant.

Again, in the fall of 1898, and before the defendant had expended any considerable amount of money on or made any considerable progress in work on its canal, a hearing respecting the same was had

before a commission appointed by the Secretary of War, to which commission the defendant presented its plans respecting its canal, and to which commission the complainant presented its plans respecting the improvement of its property, from which it plainly appeared that the complainant claimed as its right that there should flow against its property and into its works there constructed, or to be constructed by it, all that part of the flow of the St. Marys River appurtenant to the American shore, of which plans and of which claim the defendant then had full and specific notice. It further appeared by the presentation of its plans that the water which the defendant intended to carry through its canal was the water appurtenant to the Canadian shore."

Reply was verified and served in October, 1902.

Said Exhibit 14, being the instruments of record relative to the third description (Portage Street) is hereto attached, marked "Plaintiff's Exhibit 14," and made a part hereof.

Respondent, Chandler-Dunbar Water Power Company, objected to all of same except the certificate of Leander Chapman, surveyor general, relative to "the above map," being the map of Whelpley's survey, of which Exhibit 7 is copy of part, on account that same does not show or purport to show any action of any officer or commission, or that same is any part of any record in the registry of deeds, and because the act of Congress, approved September 26, 1850 (9 Stat., 469), does not authorize any such action relating to Portage Street as might be claimed to appear from such exhibit. The court sustained this objection, but allowed the introduction of that part of same and that part only embracing the certificate of Leander Chapman as surveyor general.

To which ruling counsel for the United States duly excepted, and caused its exceptions to be noted.

Petitioner also offered, and the same was received in evidence, Exhibit 27, being the tabulation of other exhibits received in evidence, showing the annual reports of the respondent, Chandler-Dunbar Water Power Company, to secretary of state of the State of
333 Michigan; also tabulation of assessed valuation of said respondents, which said exhibit is hereto attached, marked "Plaintiff's Exhibit 27," and made a part hereof.

"Respondent, Chandler-Dunbar Water Power Company, objected to any evidence of the assessment of its properties in the city of Sault Ste. Marie, on account that same are not legitimate and legal proof of the actual value of such properties."

Petitioner also offered, and the same was received in evidence, Exhibit 28, being a certified copy of a protest of respondent, the Chandler-Dunbar Water Power Company, against its assessment for the year 1898, which said exhibit is hereto attached, marked "Plaintiff's Exhibit 28," and made a part hereof:

Petitioner also offered, and the same was received in evidence, certified copy of the notice filed by the Secretary of War of the inten-

tion to take the property in question, the same being hereto attached, marked "Plaintiff's Exhibit 35," and made a part hereof.

"These revocations would refer to the permits that are now offered, or a portion of them. We also offer the permits that were issued to the —. We will call them the Clergue enterprises and the Chandler enterprises. There were two classes—one related to operations in the rapids, the other related to operations in the power canal. This includes both concerns."

Petitioner also offered, and the same was received in evidence, certified copies of the permits issued by the War Department referring to the premises in question, said exhibit being hereto attached, marked "Plaintiff's Exhibit 44," and made a part hereof.

Petitioner also offered, and the same was received in evidence, Exhibit 38, being notice to the Edison Sault Electric Company revoking the permits of August, 1892, April, 1901, March, 1903, July, 1903, May, 1905, which notice is hereto attached, marked "Plaintiff's Exhibit 38," and made a part hereof.

Petitioner also offered, and the same was received in evidence, notice to Chandler-Dunbar Water Power Company revoking permit of June 9th, 1902, a copy of which notice is hereto attached, marked "Plaintiff's Exhibit 39," and made a part hereof.

334 Petitioner also offered, and the same was received in evidence, a notice, dated November 8th, 1909, to the Edison Sault Light & Power Company revoking license of March 14th, 1899, a copy of which notice is hereto attached, marked "Plaintiff's Exhibit 40," and made a part hereof.

Petitioner also offered, and the same was received in evidence, a notice, dated November 8th, 1909, to the Edison Sault Light & Power Company revoking license of April 2nd, 1888, a copy of which is hereto attached, marked "Plaintiff's Exhibit 41," and made a part hereof.

Petitioner also offered, and the same was received in evidence, notice to the Edison Sault Electric Company, dated November 8th, 1909, revoking the license of July 6th, 1893, a copy of which is hereto attached, marked "Plaintiff's Exhibit 42," and made a part hereof.

Petitioner also offered, and the same was received in evidence, a notice, dated November 8th, 1909, to the Edison Sault Electric Company revoking license of June 15th, 1906, a copy of which notice is hereto attached, marked "Plaintiff's Exhibit 43," and made a part hereof.

Petitioner also produced one large map for the purpose of showing the general location of the premises, and its accuracy was duly proved; the same was marked "Plaintiff's Exhibit 16¼."

"Patent to village lot 3 described same in part as follows: 'According to the official plat of the survey of the said land returned by the surveyor general.'" V. L., the General Land Office.

Thereupon, to further maintain the issue on its part, the petitioner called as a witness JOHN G. STRADLEY, who, being duly sworn, testified as follows:

I reside at Sault Ste. Marie and have since 1886; am an
335 abstractor of titles and have bought and sold real estate there and am acquainted with the value of the respective parcels of land described in the petition in this case. Since I have lived there the city of Sault Ste. Marie has not claimed or improved the land north of the canal that is described on the plat as Portage Street; it has not done any work of any description on it that I know of; it had never been policed by the city to my knowledge, never lighted or worked, no sidewalks have been built, and it has not been graded in any way. The city claimed to own it several years ago before this litigation came up, but never did anything to indicate that they were using it as a street; have seen people walk over it, but not as a street, because it is not level; it was filled up with stuff from the canal and other ways—that is, rubbish; it was full of holes and brush on it; it has not been usable as a street since I have seen it; it is just as a part of the commons, all of that land over on that side. There is no bridge across the canal where Portage Street cuts it diagonally. In order to get over there they cross on the canal gates—that is, foot passengers—and the railroad bridge is up there, but there is no bridge in the line of the street; there is no recognized course of travel on this Portage Street north of the canal either for foot passengers or vehicles.

In a general way, I am familiar with the value of real estate in this locality. Eliminating the water-power value, private land claims number ninety-five and ninety-six together wouldn't be worth a thousand dollars. The Indian reserve and that portion of village lot number three involved here I wouldn't put over one hundred dollars an acre—there are nine acres and a fraction—say, a thousand dollars, eliminating all values as a strategic position in reference to water
power. I know where Islands Number One and Two are
336 located; on the same basis I would estimate their value, for the two and the value of Portage Street, at a couple hundred dollars. On the same basis, I would think Island Number Five would be worth one thousand dollars. I refer to the value at the time of the taking by the Government.

Cross-examination by Mr. HANDY:

I have resided at the Sault nearly twenty-five years; since the spring of '89 have been engaged in the abstract and real estate business. Portage Avenue north of the canal has never been used for street purposes to my knowledge; am familiar with property on both sides of it. There has never been anything over there that demanded the improvement of the street; there are two or three little shacks over there, no manufacturing institutions, or anything of

that kind that would require the use of the street. There was no demand for a street, but there was no reason why it could no have been opened as a street if there had been a demand; there is a spoil bank over there on part of it. I have been mayor of the city of Sault Ste. Marie and am familiar with the public works of the city. I know of nothing being done by the city which would tend to close up the street or prevent its being used for travel. This part of the street in question is included in the land necessary for the proposed new canal. The value I gave was without regard to the riparian rights. Portage Avenue is as well adapted for canal purposes as the other property on either side of it.

Cross-examination by Mr. Goff, he testified: For a railroad crossing you would have to go north or south about 300 miles from the Soo for the purpose of crossing a bridge crossing. There is a ferry at the straits of Mackinac. Port Huron, Detroit, Niagara Falls, and Buffalo are the only places where there is a bridge crossing.

Q. Do you know of any place where there could possibly be any more international crossings than you have mentioned?

A. Oh, it is possible to cross anywhere along the St. Marys River down to St. Josephs Island by building enough bridges, but that is in that immediate vicinity. It is about the same condition that the right of way for a railroad would be. It is worth a good deal more if the railroad wanted it than if you wanted to sell it to somebody else, you know.

337 L. C. SABIN, a witness for the Government, was then called, who being duly sworn, testified as follows:

I reside at the city of Sault Ste. Marie, and during the past fifteen years have been assistant engineer in charge of the Government works at the Sault; I am a civil engineer and received my technical education as such at the University of Michigan. Have been in the employ of the Government as such for about twenty-one years; I am familiar with all of the premises in question, and this large Government map in the court room shows the various properties correctly.

The Indian reserve, a part of village lot number three, and a small part of village lot number four, may be included in this yellow; also claims ninety-five and ninety-six colored in yellow; these are the properties of the Chandler-Dunbar Company. The meandering line is at the outer edge of the yellow portion. The red portion is the right of way of the Sault Ste. Marie Bridge Company; the southeast corner of that is upland, very small portion; the rest of it is all subaqueous land but is colored in red to show what strip the bridge company owns. The green portion represents the extension on the map of Portage Avenue north of the canal lands toward the northwest over to the meander line on the river front. The purple is island number five. The Michigan Lake Superior Power Company's canal is indicated on the map and runs through the village of Sault Ste. Marie and discharges below the village at its power house.

That is marked black. Next to the power house is the Union Carbide Company; islands one and two are next west of the new power house of the Edison Sault Electric Company. The old power house of the Edison Sault Electric Company is at the east end of the Indian reserve, farther in shore, and opposite it.

338 The head race of the present Edison Sault development starts just about the bridge and it passes through the first two spans, running easterly, finally coming to their new power house; their present tail race is below the power house emptying into the rapids, just opposite island number five. The land that lies north of the tail race and north of the head race as it appears on the map is all made land. The old head race of the Edison Sault Electric Company was also made land. The new power house was built and ready for occupation about 1907. The international bridge crosses the river near the head of the rapids; just west of the international bridge are some marks on the submerged land. I am not personally familiar with the history of those, but I have understood what may be called ice piers. Cribs were sunk and capped over and they intercepted a portion of the water and a portion of the ice, the object of them being to shunt the ice away from the head race. They were built by the Chandler-Dunbar Company. This place [indicating] is marked main dock and canal widening. It is spoil, excavated from the widening of the canals running out on cars and dumped in this place here. Here are the compensating works. As I understand it all on the Canadian side. By compensating works is meant two compensate for the amount of water that is taken by some canal not heretofore existing to hold back as much water as would be taken by some canal for water power purposes. The permits do not refer to them; there was in all permits issued a statement that the level of Lake Superior must be held at a certain elevation, and that certain works which should be subject to the approval of United States officers, were to be built to accomplish that result. I don't anticipate that any permits for these works has been revoked, for the reason that they were understood to have been built on Canadian

339 soil. There is a possible fourth lock on the map; that is simply a tentative delineation, or probably what would be recommended in case a fourth lock was authorized. July 31st, 1900, a permit was given to the Michigan Lake Superior Power Company to dredge eighteen feet deep in the river east of the locks; this is a permit similar to those granted the people desiring to put up docks any where on the river. On December 12th, 1902, a permit was issued to that company to divert water from the river into the canal, under the act of July 30th, 1902. The Wetzel Lock was completed in 1881; the Poe Lock in 1896. The third lock is now under construction. A survey has been ordered for an additional fourth lock; immediately below the east end of the yellow parcel, called the Indian reserve and extending easterly from that point, the United States owns all the shore lands down to the easterly end of the Fort

Brady Reservation. Island number five is rather a low island covered with bowlders and gravel and such brush. Without regard to the value of its appurtenant rights I should say it was worth five hundred dollars. It is about one-third of an acre in area. Islands one and two are similar in character to island number five. Island number two is about two acres in area; island number one, about one-fifth of an acre. I should think their value outside of water power would be about five hundred dollars for those two islands. The Indian reservation land is all low area two or three feet above the ordinary water level, rather marshy in the original state. There are a few buildings, warehouses and the like on this property, not of a permanent character; no docks. I should put the value of this Indian reserve land at about one thousand dollars. Stripped of value for hydraulic purposes, eliminating the value of private land claims ninety-five and ninety-six, I should put its value at about $1,000.00 for a dock.

340 Cross-examination by Mr. HOOPER:

These permits or licenses all declare that they were revocable at the pleasure of the Secretary of War. I don't know whether if a man objected to have it in that form whether he could get it in any other or not: no test was made of that question to my knowledge.

Islands 1 and 2 are those that were in litigation between the United States and the Chandler-Dunbar Water Power Company.

The land immediately below the east end of the yellow parcel and extending down easterly to the westerly end of Fort Brady Reservation belongs to the United States. It has never been patented.

The permit to lay a cable across the canal was approximately where the dotted line is. The company now has a tunnel there in the same place that the cable was in, say, within fifty feet of that location.

The cable is now in the tunnel.

There is a railway or a tramway there very largely on the property which was deeded to the United States for the canal widening. That tramway, however, runs across the western end of the Indian reserve and may run out onto or near the eastern end. Most of the track is on the land which was given by or deeded for the canal widening.

That siding is built from the international bridge.

Two or three railroads, I believe, joined in the operation of the bridge. I think that siding was built partly by the United States, partly by the railroad company. But at the time of its taking the railroad which was there at that time, I am not informed as to who built it, whether Mr. Chandler built it or whether the railroad did, but it was on the Chandler property.

The dock on 95 and 96 is 100 feet to the inch, about 400 feet long. It is just wide enough to have a railroad track on it, or was at the time of the taking. I am not sure whether the railroad track is there now or not, but I think it is. It has been rendered practically

inaccessible to the river above by Government work done since the taking.

JOHN BOGART, a witness produced on behalf of the petitioner, being duly sworn, testified as follows:

I am a civil engineer. The value of the power house and equipment of the Edison Sault Electric Company is $260,110. The value of the tail race is $59,327.00; the value of the tail race on the Government land is $26,436.00; the cost of restoring the tail race to its condition before any excavation by the Chandler-Dunbar Water Power Company, $3,884.00; the value of the tail race excavated on the United States land to the United States for the use of water-power development, $22,123.00; the value of the cable and tunnel, $7,082.00; the value of the distributing system south of the canal, $152,874.00; additional property of the Edison Sault Electric Company not included in the above, as follows: Distributing system located on the Chandler-Dunbar property north of the canal, $2,152.00; located on Government property south of the canal, $1,059.00; located on what is claimed as Government property north of the canal and on the island between the two lots, $7,322.00; five frame warehouses on the Chandler-Dunbar property, $1,665.00. The United States furnished material and labor in building the extention to the
341 original tunnel under the ship canal, made necessary by canal widening, the estimated original cost of which amounts to $3,721.00. All construction appurtenant to the forebay and head race between the power house and the west line of the north and south embankment of the old channel of the Chandler-Dunbar Water Power Company head race, which embankment was located approximately four hundred feet west of said power house are included in the value of the power house given, $260,110.00. This construction does not include the railways and tressels, leading to the power house.

Thereupon the Government rested its case.

342 Thereupon, to maintain the issue on its part, the Chandler-Dunbar Water Power Company, respondent, called as a witness JOSEPH RIPLEY, who, being duly sworn, testified as follows:

Direct examination:

I live in Albany, New York, and am a civil engineer; have been since 1876. I have been engaged in civil engineering pertaining to ship canals, improvement of rivers. My first work was at Sault Ste. Marie, as inspector of masonry on the Weitzel Lock, and then as assistant engineer, and as general superintendent from 1898 to 1906. Then I was employed on the Panama Canal as a member of the board of consulting engineers, and from July, 1906, was the assistant chief engineer. In July, 1907, I was employed as advisory engineer to the superintendent of public works of the State of New York. He had charge of the maintenance and operation of the

canals, and also the letting of the contracts and seeing to the progress of the work on the new barge canal. In November, 1909, I was appointed a member of the consulting board of engineers for New York State canals, and now occupy that position. I have something to do with reference to the condemnation of water power.

Q. On the basis of the use of the present space in the St. Marys River for locks, including the possible fourth lock, and four thousand cubic second-feet for navigation, power to be used in the bed of the stream, with railroad transportation to and from mills in the bed of the stream, what is the value of that power; take the head as fixed by the engineers in consultation and take the flow as fixed by them, as you understand it?

COUNSEL FOR THE GOVERNMENT. We object to this testimony and all other testimony bearing on the value of water power in the river as incompetent, irrelevant, and immaterial, for the reason that under Article I, section 8, of the Constitution of the United States, which provides that Congress shall have power to regulate commerce
343 with foreign nations and among the several States and with the Indian tribes, the determination of the Congress of the United States, in section 11 of the river and harbor bill of 1909, being the act under which this proceeding is had, and in which it is declared "That the ownership in fee simple absolute by the United States of all lands and property, of every kind and description, north of the present St. Marys Falls Ship Canal, through its entire length, and lying between said ship canal and the international boundary line, at Sault Ste. Marie, in the State of Michigan, is necessary for the purposes of navigation of said waters, and the waters connected therewith," is conclusive evidence of the necessity of this taking; and the determination and declaration of such necessity is a political legislative prerogative of Congress behind which the courts possess no jurisdiction to inquire.

The estate of the sovereign is paramount to that of the riparian owner. The determination of the question of the mode of use of the water of the St. Marys River and the subaqueous land for navigation and its incidents is exclusively a legislative one. The use of the subaqueous land and the usufruct of the water for all navigation purposes are the property of the nation, and are not the private property of the riparian owner. The riparian owner can claim no value for itself in the usufruct of the water or the subaqueous land as its private property against the sovereign when the people see fit to appropriate the same for navigation uses through the properly organized authority. No water power development could be made in the St. Marys River without the consent and license from the United States, and Congress by the act in question has expressly revoked all licenses and permits for water power developments in this stream; and any dams, gates, or other obstructions in the stream for the purpose of developing power would be nuisances per se without such governmental license. It is the claim of the Government that pursuant to

its power to regulate interstate and international commerce it
344 has the right under the Constitution, as exercised by the act in question, to appropriate and use the subaqueous lands and the usufruct of the water for navigation improvements without condemnation and without compensation to the riparian owner, and that the riparian owner has no private property in such subaqueous land and the usufruct of the water as against the sovereign when so appropriated and used, and that the Congress of the United States, having the power to regulate commerce, which includes navigation, has the exclusive power of determining the needs of navigation, and that the needs of navigation are not the subject of judicial inquiry.

The COURT. This objection may be overruled. I think it is a question for the court to determine in these proceedings how much of this subaqueous land and water are needed for navigation purposes, how much the surplus over such needs is, and the value of such surplus. This class of testimony may be received, and it may be understood that the Government has made an objection and taken and been allowed an exception to this testimony and all this class of testimony received during the progress of the trial, without repetition of the objection above noted.

To which ruling and holding of the court the counsel for the Government did then and there except.

A. The head, with mean elevation of Lake Superior of 602.45, and allowing for the velocity flow at the east boundary line of the Chandler-Dunbar properties for that head—for that gauge elevation the fall would be 9.77 feet in front of the Chandler-Dunbar lands. The mean discharge of Lake Superior, computed on the basis given by the report of the engineers, would be 80,800 cubic second-feet. A development would be possible whereby a head at the wheels could be secured of about nine and a half feet that would give 28,000 horsepower, computed on a basis of 68 per cent efficiency. That would include the electrical development, however, that 68 per cent in efficiency, give a little larger horsepower, which I did not have
345 time to compute, for simply—on the basis of the question as asked. The cost of development of that power would be in the neighborhood of two million three hundred thousand dollars. The operating expenses would be somewhere between $10 and $12 per horsepower per year. The power could be used for various purposes, such as making pulp, paper, grinding wheat, furniture manufacturing, and, computed on the basis of $32 per year per horsepower, the value per horsepower would be from $20 to $22 annual rental. The profit, the value of the horsepower after taking out operating expenses, would be $20 to $22. That capitalized at 10% would be $200 to $220, the value per horsepower, and for 28,000 would be between five and six million dollars. My figures are based on one-half the flow less 2,000 second-feet.

While I was in charge of the works at Sault Ste. Marie I made considerable calculations as to the volume of flow necessary for the

purposes of navigation. In reporting on probable increase in navigation and the locks necessary to take care of that increased navigation and the amount of water to be used for navigation purposes I based my computation on the traffic for the year 1905, and that year there was 5,288 lockages through the Poe Lock, and the number of vessels passed in these lockages was 9,458. The tonnage was 36,543,484, and the lockage time totaled 3,086 hours, or 52% of the total time of the season of 5,904 hours, the season being about 243 days.

In determining the number of lockages possible in a day to the lockage time you would have to add the time of passing of the outgoing boat over a distance of 400 feet which the waiting boat was required to keep away from the lock gates and also the additional time for the approaching boat to pass over the same distance, and I took careful observations, and that time was between three and four minutes; I allowed—that is, for each movement it would be between six and seven minutes for the two movements. I
346 allowed nine minutes, and this would reduce the idle time that the lock wasn't in operation to 2,025 hours, or to 34%. Now, if the lock had been continuously employed during the entire season—that is, for 220 days—and of full capacity, and allowing only half traffic for the 20 days in the spring and 20 days in the fall, the tonnage would have amounted to nearly 49 million tons that would have been passed through the Poe Lock alone. Then, computing on the basis of the business done in the Poe Lock in June, 1905, during 444 hours of operation, the tonnage during the season would have amounted to 62 million tons; and taking it for a single day, June 25th, there is 284,293 tons passed in 28 lockages. The lock was in use 18 hours and 7 minutes of the 24 hours, and the total for the season would have been 75 million tons. The new lock that was proposed, 1,300 feet long and 80 feet wide, has about a third more capacity than the Poe Lock; and for the size and draft of boats being the same as for the season of 1905, and assume the Poe Lock could pass only 50 million tons in a season, the two locks pass 116 million tons. The improvements in the river, the new lock would give a greater draft of five feet than was available in 1905, and that would increase the capacity a third more, or making a total of 155 million tons.

Now, with another lock on the Canadian side, and the Canadian Lock deepened and the Weitzel Lock replaced with a new lock 1,300 feet long, and a new canal with the two new locks each 1,300 feet by 80 feet wide, they would have three times 155, or 465 million tons, and that could be carried through by ships of the size of 1905, but, of course, with such a traffic, why, your ships would be larger. The beam is restricted to less than 60 feet now because the Poe Lock is the only one that has a greater width than that, and in case of accident to that ship owners are afraid to build greater than 60 feet at the present time, so that we could add a quarter to that tonnage and bring it up to 600 million tons. Now, I check that up in

347 this way: Assuming 45 minutes to a lockage, a little longer time than what was the average for the season of 1905 for the Poe Lock, and assuming one and a half vessels an average per lockage, although for the Poe Lock it is one and eight-tenths for that season, that would make one boat every half hour, or 48 boats per day of 24 hours, for one lock, and for six locks would be 288 boats passing the canals. Now, assuming that the cargo loaded was 15,000 tons per vessel for all the downbound vessels, and assuming that one-fourth, as one-fourth of the traffic is upbound—assuming one-fourth of the upbound boats loaded at 15,000 tons each, that would be 180 boats loaded with 15,000 tons, or two million seven hundred thousand tons daily, or for 220 days full traffic would be 594 million tons; that would give six boats per hour each way, and the boats could be a mile apart and traveling at the speed of six miles an hour through the river channels, all of which is conservative and within the possibilities.

Now for the use of the water for lockage purposes. There were 21 lockages a day for the season of 1905 through the Poe Lock, or 246 second-feet for the season, for the year. For the Weitzel Lock there were 17 lockages a day, or 98 second-feet for the year; and the Canadian Lock has also 17 lockages a day, or 136 second-feet. Now, the new lock will take 22.8 feet per second, or 486 second-feet per year, for the maximum lockages of 32. The Canadian Lock would take 256 and the Poe Lock 375 for 32 lockages a day for the season, or that would make 2,575 second-feet; but that is considered as a full lock of water for every lockage, which would be true if a lock was simply passing boats in one direction; but as a matter of fact they came in about the ratio of one-third one direction and two-thirds the other, so, taking off one-third from that would be 1,700 second-feet as the amount needed for lockage water for passing 600 million tons freight.

That is based on the fall of 19 feet, which was the average for
348 the season of 1905. Of course, for 20 feet you would add one-nineteenth to that, making about 1,800. For operating of lock machinery, lighting of grounds, and so forth, you would need somewhere from 250 to 300 second-feet, and allowing 100 to 150 for leakages and wastage at locks, we would have not to exceed 2,250 feet necessary for navigation purposes through the canals. For the passage of logs there would be some additional water, and the International Commission put the amount at a total of 4,000 second-feet, which leaves 1,800 second-feet for available passage of logs.

The works I have in view with reference to developing the Chandler-Dunbar water power would be to build a dike along their north boundary, starting above the international bridge, at the south end of the Canadian intercepting works, and extending it downstream along their north boundary line to their east boundary line, and then building the power-house construction along somewhere near the easterly line of the Chandler-Dunbar property. You would have to put in suitable gates for the discharge of the water. You would discharge a certain portion, or all, according to the state of

Lake Superior, through your turbine wheels. It would be practicable through remedial or intercepting works to discharge 65% of the flow of the river, if you were not entitled to use but 50% of the water, without material increase of expense. It would be expensive, possible, to keep the flow at 80,000 second-feet through a long series of years; but the range for past years, based on monthly means, has been about 3 feet from low water to high water stages, and that could be reduced with the works that you would put in for construction purposes to about 18 inches, and with a steady flow of 70 to 73 thousand second-feet. I apportion 1,800 cubic second-feet to the carriage of forest products. In my mind that would be for forest products and for a short period of a few days in the spring to the passing of ice. It would be practicable to construct in remedial works means for passing forest products. You could build a sluiceway with a stony gate and keep that closed, except at the time
349 that you want to pass the products. If the products were to be passed substantial, as appears in the table on page 20 of the Statistical Report of Lake Commerce, 100 second-feet would be ample. A thousand million tons could be carried through the locks with the use of 4,000 cubic second-feet. The taking of water for the filling of locks from the forebay would make no difference as to the water-power development, because that water goes for navigation purposes, and it is taken from the upper pool in either case, whether it goes through the water-power forebay or goes through the ship canal.

Cross-examination:

I estimate the cost of development from two million three hundred thousand to two million four hundred thousand. Will take the latter figure. Capitalized at 10%, would require a return on that investment of $240,000 per year. In my statement I have proceeded on the theory of an elevation of Lake Superior of 602.45. I could not say that there has been a year in the last three years that that elevation has been attained in any month. I estimate the flow at 80,800 second-feet. I could not say that there has been a flow of 80,800 second-feet in any month in the last three years. My estimate is based on the flow from the year 1860 to January, 1911. It would not be a safe proposition to make a development that was not based on actual conditions and actual flow and actual levels. It would not be safe to make it on theoretical conditions. My figures are based on a development of 28,000 horsepower and a sale at $32 per horsepower, upon a basis of a load factor of 100%. I have understood that the plant at the Sault had a load factor of 100% or more. I did not hear the testimony given here that their load factor was from 30% to 35%. If the load factor was 33⅓% with the capacity at the Sault, the output would be substantially 9,000 horsepower. At a profit of $20, that would be $180,000, which would be substantially $50,000 less than enough to pay the interest on the cost of development.

350 I apportion 1,800 cubic second-feet to the carriage of forest products and for a short period of a few days in the spring to the passing of ice. You can build a sluiceway with a stony gate and keep that closed, except at the time that you want to pass the products—forest products and ice; 100 second-feet would be ample for the ice.

Whether or not the price runs in proportion to the number of hours taken or the per cent of load factor depends on what time the customer wanted to take it, whether at the time when you was at the peak load or not.

If it was at the time when you did not have any other customer, you would sell him correspondingly low; but if it was at the time when there was demand, it would be correspondingly high.

Redirect examination:

When you have varied industries suppliable by a plant it is practicable to sell more power than you produce; that is, to sell the same power twice. You sell it to one customer, and he uses it certain hours of the day, and you sell it to another customer that uses it other hours of the day.

For an electrical plant under conditions that would warrant the building of a plant such as we have in mind the load factor would not be less than 66⅔ per cent and would probably exceed that some certain amount; what amount I couldn't say. Therefore we would reduce the estimate of the value of the plant by that amount. If it was for the development for use of power not electrical entirely, why, for certain purposes the load factor would be nearly a hundred per cent, between ninety and a hundred per cent.

Assuming the load factor was 65% of your electrical output, and you were distributing it for divers domestic uses, varied industries, I should say that it would run from ten to twenty per cent in excess of 100%.

Some of this power you would sell for a great deal more than $32 per horsepower and some for less. I took those things into consideration when I made my estimate.

Respecting the present low stage of water: The natural cross section of the discharge over the rapids has been increased by the construction of the ship and water-power canals. First ship canal on the American side was in about 1855 and others at various times since and the water-power canals along in the nineties. The Michigan-Lake Superior Power Company's canal was calculated to start with 31,000 second-feet. The Industrial Canal on the Canadian side has a capacity of about 13,000 second-feet. The remedial works have not been sufficient to compensate for the amount of water taken by these two canals, if they are used the full capacity of the canals.

The cost of the remedial works which I speak about was included in my estimate of cost of improvement.

So far as the water for power development in the fall belonging to the Portage Street property, it would be nothing. But as a restriction on adjoining property, the property next below, it might have some hold-up value.

Redirect examination:

It would make no difference to the water-power development to use the water for filling the locks from the forebay. It is taken from the upper pool in either case. Remedial works are structures necessary in aid of navigation to compensate for water taken through power canals. Such remedial works would increase the amount of power. Outside of such remedial works as may be necessary, I can not conceive of any other structure possible in these rapids in aid of navigation.

Further cross-examination:

My plan contemplates excavation at the international bridge. As a general proposition, if you regulate the levels, the flow will fluctuate. If you regulate the flow, the levels must fluctuate.

Redirect examination:

Q. What in your judgment is the value of that piece of land colored in yellow; and if it has a different value by reason of Portage Avenue, give its value excluding and including Portage Avenue?

A. Based on the comparative prices paid for the lands north of Water Street and below the locks—that sum being $400,000—I should say that the value of the Chandler-Dunbar lands colored on the map, including Portage Avenue, for canal purposes would be worth about half a million dollars.

COUNSEL FOR THE GOVERNMENT. We move to strike out the value given by the witness for canal purposes for the reason that the necessities of the Government can not be made a basis of valuation, and the use to which the land is to be put by the condemnor can not be considered in making the award.

Which motion the court did then and there overrule, and to which ruling the Government did then and there except.

The placing of the piers for the international bridge and the work done by the Chandler-Dunbar Company, or the original company there, with reference to the construction of their new
351 power canal, placing the material out in the rapids, raised the level of Lake Superior, I should think, permanently about five inches.

Thereupon, to further maintain the issue on its part, the respondent Chandler-Dunbar Water Power Company called as a witness THOMAS W. ORBISON, who, subject to the same objection as that made to the testimony of the witness Joseph Ripley, and the same ruling and exception, testified as follows:

Direct examination:

I am a hydraulic engineer of large experience, both as engineer and contractor. The cost of bringing the power to the mill site is the building of a wing wall alongside the international boundary line, on the south side of it, and I estimate that cost at $107,380. That includes 100 feet of gates for the discharge of excess water at any time. It would include facility for discharging forest products through the channel.

Q. What would you consider the reduction in value on account of the use of more volume of flow than 4,000 cubic second-feet for navigation or any other public use, for each additional thousand second-feet?

A. Well, I would make that—I would consider that pro rata for anything up to one-third of the volume of flow.

Q. What would you consider the reduction in value on account of additional space taken for locks beyond the possible fourth lock shown on the Government map?

A. It would make the improvement more expensive for the reason that it would shorten up the distance remaining for improvement between the contemplated locks and the international boundary line, and would only lessen the value of the power to the extent of the interest on a somewhat greater cost of improvement, a comparatively slight difference.

In the estimate that I have made, I have considered that the flumes used for harnessing the power would constitute re-
352 medial works, not only the flumes, but the gates and the dike.

My plan with reference to remedial works is to start in at the present Edison Sault Electric Company's plant and build flumes for power purposes in a northerly direction, out to within 100 feet of the—125 feet, say, of the international boundary line, and then install some taintor gates with a capacity of about 100 feet width of river, and then a dyke from there out along inside of the international boundary line to the bridge pier of the international bridge, that is just about on the international boundary line.

I have made an examination of the capacity of the Michigan Lake Superior Power Company's canal at the Sault. My estimate of the capacity of that canal with reasonable economy is 20,000 second-feet. That would cause a loss of head of 1.09 feet, which would be, in my opinion, very economical. I have figured the cost of bringing this power to the shaft, and have a plan of the construction which I would make.

(Witness produced plan, marked "Defendant's Exhibit 21.")

This plan projects remedial works. I estimate the cost of the execution of this plan to the point that you bring the power to the shaft at $1,832,736, and I figure the cost of operation and depreciation, including water rental, at $12.06, figuring the rental of the water power at $5. A fair rental value of the power on the shaft is $18. To use this water, I would build a pulp mill in the bed of the stream over these flumes. There is ample room for it. If there was no lock

built outside of the possible fourth lock, there would still be room for the major portion of this pulp mill. I think that an arrangement could be made to develop it all, possibly. It would cost a litle more per horsepower. In making my computations I have assumed that the high water discharge on the Canadian side was 32% and on the American side 68%. The engineers fixed the amount of flow on the two sides of the international boundary line at 35% and 65%, but taking my figures for it, the Chandler-Dunbar Company would
353 in high water have to take care of 76,550 second-feet; that is, with the extreme high flow of 112,574 second-feet. I believe that is correct. I had to pick it up here. I mean to get rid of it through our works, through our remedial works. We can get through with that by blocking our wheels, if we are not running them, a part of it, and the rest through our remedial works; and our remedial works consist not only of—the openings in the remedial works consist not only of the gates that I have shown, but gates in the back ends of our flumes; every one of our flumes is opened or capable of being opened by raising a gate and letting the water out. As I started to say, I provided for taking care of 93,288 second-feet, and the flow in high water, as I have already said, is 76,550 second-feet, leaving a leeway of 16,738 second-feet. I have provided for the passing of forest products. I haven't thought of the extent of it. It is ample, I should think, for several hundred millions a year. I have considered that the 4,000 second feet for navigation took care of the—I haven't considered the question of the actual taking care of logs or timber going down stream, because I didn't think there would be any logs going down to amount to anything. The amount of water necessary to carry the logs would be inconsiderable.

I had under consideration the excavating up here towards the International Bridge. That would depend on whether the company developing thought it would be advisable or not to save friction head.

In answer to a question by the court: I base my estimate of values on a capitalization at four per cent.

I don't think that the ice conditions there would be materially bad. I don't think that they would be as bad there as perhaps in some smaller rivers after this improvement is made.

I would make the dike along the territory near the Canadian line.

And to further maintain the issue on its part, the respondent Chandler-Dunbar Water Power Company produced as a witness JOSEPH W. WALLACE, who, subject to the same objection, ruling and exception heretofore noted as to the testimony of the witness Joseph Ripley, testified as follows:

I have had a very long and varied experience in engineering and building of manufacturing plants and water-power developments in the United States, in Canada, in Sweden, Norway, Germany, and France. I was called to the Sault in 1902 in connection with the

proposed plant on the Chandler-Dunbar Water Power Company's property, and about that time for a proposed plant to utilize
354 power for the Michigan Lake Superior Power Company and building a pulp plant down below at Hay Lake Channel, to be operated from the Michigan Lake Superior Power Company's power canal. In connection with the plant proposed on the Chandler-Dunbar Water Company's property, we investigated sufficiently to see that the building of a plant at that point was practical and that there was power enough for the purposes for which they proposed to build the plant. They proposed to build a plant requiring about 9,900 horsepower. We completed our plans for pulp and paper plants and received bids and had practically closed bids on some of the apparatus and on foundation work. The project was discontinued on account of uncertainty as to the title and the investors' unwillingness to proceed under that condition. I had plans made for this development. I produce them here for examination. In connection with that enterprise, I made calculations respecting the cost of development. My estimate of the cost, including the groundwood pulp mill and electric power for operating the chemical pulp and paper plant, was to use 9,900 horsepower; total plant was $1,661,000. This estimate was corroborated by bids from various contractors. It appeared to be a very practical situation for a pulp and paper plant in every respect. We did not consider the project a closed one. We have had several conferences since that time regarding the possibilities of proceeding. Cost is slightly greater to-day. Would estimate present cost $1,783,640, the difference of 8%, $155,628. I have estimated the cost of developments which appear to me logical for a power company to make if they were selling power in form of water delivered to the mill or to the flume of consumer. That would include such canals and excavation for bringing the water to the flume and taking it from the flume as would be required outside of the plant itself. That would include a dike along the territory near the Canadian territory line or international boundary. I estimate the cost of that at $233,415, this includ-
355 ing cost of necessary dikes, forebays, and tail-race excavation. Estimate based on concrete, which would show very slight depreciation. There is a copy of both of these plans in this report I handed in.

(Plans offered in evidence, marked "Plan A.")

And to further maintain the issue on its part, the respondent Chandler-Dunbar Water Power Company produced as a witness GARDNER S. WILLIAMS, who, being duly sworn, testified:

I am a professor of civil and hydraulic engineering at the University of Michigan. I designed the plant of the Edison Sault Company, located in the rapids of the Ste. Marys River, and superintended its construction. It was under my supervision. The embank-

ment of the Edison Sault plant might need a little repair now and then, due to the effect of ice or something of that sort, but it would be inconsequential. Such work is very enduring.

Professor WILLIAMS recalled by this respondent.

I furnished the Government certain plans for proposed electric development of power on the Chandler-Dunbar Water Power Company's property at the Sault. I have copies. These are the copies. Two plans, 1 and 2.

These plans offered in evidence. (Defendant's Ex. 28.)

This map, spoken of here as the Chandler-Dunbar Water Power Company and Edison-Sault Electric Company map (marked "Ex. 24"), is drawn to a scale and is substantially correct. It was prepared under my direction. It substantially represents the situation on the St. Marys River with reference to the improvements that have been made in the river by the Edison Sault Company, the Chandler-Dunbar Company, and the United States.

To complete the Edison-Sault plant as it was planned under my direction would cost $130,000 to $150,000, I think. That means for the entire nine wheels. Such a plant would develop on a nine-foot head, 4,500 horsepower, electrical energy at the switch board.

But to develop that amount of power would require some changes in the head-race, such as excavation above the power house in the rapids, so as to enable the quantity of water required by the power house to be delivered without the excessive fall that exists in the state of nature. To reduce the velocity of the current and bring the water to the power house at substantially its elevation above the International bridge. Either the present headrace would have to be materially deepened or a less deep headrace provided by building a dike further out from where it is now. I have been talking about switchboard horsepower. 4,500 switchboard horsepower equals about 6,500 theoretical horsepower.

Q. What would be the interest charge on the cost of the change?

A. It is somewhere between five and six per cent, say, for a private investor.

On cross-examination:

Under the present unit with the present wheels on 9½-foot head this plant produces about 900 horsepower.

In calculating for an improvement to use all the power, the Chandler-Dunbar Water Power Company is entitled to, I figure, excavation at $1 for earth and $2.50 for rock. And for concrete $12 and $15 a yard. There are two grades of concrete; the thinner sections cost more, the heavier ones less. They come in at $12 and the other for $15.

There are in there now four units and you can put in five more. With the five more added, with present conditions of headrace, you could get 2,000 electrical horsepower.

For an extension of this plant across the river, I would have two turbines for each generator.

Respondent offered in evidence letter from Wm. Chandler to Major F. U. Farquhar, dated May 19, 1883, which was as follows:

SAULT STE. MARIE, *May 19, 1883.*

Major F. U. FARQUHAR,
Corps of Engineers, U. S. A., Detroit.

MAJOR: Referring to correspondence between Mr. E. S. Wheeler and yourself concerning a tract of land on the north side of the canal between it and the rapids, located by me with Porterfield scrip at the local land office at Marquette, Mich., June 3, 1880, and which is now pending on appeal before the Hon. Secretary of the Interior, I will submit the same proposition to you that I made verbally to your predecessor, Genl. Weitzel, regarding the terms upon which the United States could secure a title, providing the appeal proceedings are decided in my favor.

1st. Should the United States wish to secure this tract of land for canal purposes I will make deed to the same for any compensation that you and Mr. Wheeler may, after an investigation of all the facts concerning my location of the same, deem just and equitable.

2nd. Should the United States only desire the title to the lower end of the tract I will deed that portion of it without compensation.

The above is the same proposition made to Genl. Weitzel except that your name and Mr. Wheeler's are substituted for those of Genl. Weifzel and Mr. Nobles.

Respectfully,

WM. CHANDLER.

This respondent offered in evidence Exhibit 29, being a blue print of the present plan of the Government works for water-power purposes at the rapids.

And to further maintain the issue on its part, the respondent Chandler-Dunbar Water Power Company offered in evidence those parts of the report of the International Waterways Commission on Regulation of Lake Erie, published in 1910, being paragraph 42 on page 22, which was received in evidence, subject to the objection by the Government hereinbefore noted and subject to the same ruling and exception. Said paragraph is as follows:

"Attention is invited also to a discussion of the use of Lake Superior as a reservoir, which has been proposed by persons not familiar with the Great Lakes, to compensate for the diversion of water through the Chicago Drainage Canal. The result of the discussion is to show: 1, that Lake Superior, being naturally one of the greatest and best regulators of flow to be found in the world, maintains a flow in the St. Marys River, its outlet, which is remarkably uniform; 2, that uniformity of flow in that river is essential to the best interests of navigation of the river itself; 3, that dur-
356 ing the winter months when navigation is suspended this uniformity of flow is still necessary to maintain the level of Lake Huron, and keep it in condition to maintain in its turn the St. Clair

and Detroit Rivers in the spring when navigation opens. It is not in the power of man to improve this uniformity of flow to any important degree. He may disturb it, making it less uniform, by storing water in Lake Superior, but any water withheld at one season would create a deficiency in the lake below, which must be replaced by an equivalent increase of discharge from Lake Superior at another season. This would simply increase the oscillations in the levels of the lakes below; that is, would injure them without compensating in any degree for the diversion of water through the Chicago Drainage Canal."

Said respondent also offered in evidence, subject to like objection, ruling, and exception, from the same report, pages 162 and 163, being Tables 38 and 39, which are hereby referred to and made a part of the bill of exceptions herein.

Said respondent also offered, and there was received in evidence, subject to like objection, ruling, and exception, from "Progress Report of the International Waterways Commission," page 7, paragraph 15, and specifically this:

"The quantity of water consumed in the operation of the canals during the eight months of navigation is about 1,200 cubic feet per second. The quantity required in the future will be greater. Not less than four thousand cubic feet should be unconditionally reserved for canal uses, and in granting power privileges the respective Governments should not forfeit the right to increase the amount indefinitely. It may be remarked in passing that raft navigation over the rapids has so greatly diminished and is now so small in amount, that the quantities of water above mentioned will suffice to provide for it. This leaves about sixty thousand cubic feet which may be temporarily used for power purposes."

Said respondent also offered, and there was received in evi-
dence, subject to like objection, ruling, and exception, from
357 "Report upon the conditions existing at Sault Ste. Marie with rules for the control of the same recommended by the International Waterways Commission," dated May 3, 1906, from page 9, the last clause, as follows:

"The interests constructing these works claim the right to do so, not only under the permits granted, but so far as the occupation of the bed of the rapids opposite the Chandler lands is concerned, by virtue of asserted riparian rights appurtenant to the ownership of the adjacent shore. In a litigation now pending, brought by the United States against the Chandler-Dunbar Water Power Company, in the Western District of Michigan, the District Court has decided that the ownership of the shore lands carries with it the title to the bed of the river, including Islands No. 1 and 2, and from this it follows that the right to erect structures in the river to utilize the waters of the river for power purposes as it flows past the riparian owner's land, exists, subject merely to the restriction that the structures must not, directly or indirectly, injuriously affect navigation."

Mr. HOOPER. The respondent offers in evidence from the statement of the managers on the part of the House relative to the act of Congress passed in 1907, which is attached to the conference report relative to the river and harbor appropriation bill, a certain statement.

COUNSEL FOR THE GOVERNMENT. We object to this paper being received, for the reason that the act in question is unambiguous, does not require legislative history to aid in its construction, and for the further reason that the act of 1907, which is referred to in this paper, was repealed by the river and harbor appropriation bill of 1909, being the act under consideration in this case.

Which objection the court did then and there overrule, and to which ruling the Government did then and there except.

Said paper is as follows:

"Aside from items of appropriation, the two main differences between the House and the Senate were in the provision for the
358 acquisition of necessary land for the construction of a canal in St. Marys River, Michigan. Upon this an agreement has been reached which is set forth in the conference report. The Senate provision sought to authorize the acquisition of all land and waters between the existing canal in St. Mary's River and the international boundary line. The question of the acquisition of this land is much embarrassed by conflicting claims of title. The provision as agreed upon provides only for the acquisition of the land immediately needed for the new canal and lock appropriated for in this bill, but seeks to prevent the creation of rights which will hereafter embarrass the Government in case, as is probable, other canals and locks may be needed to meet the growing demands of traffic."

Mr. HOOPER. I also offer in evidence the report of the chairman of the Committee on Rivers and Harbors to accompany H. R. 28,243, 60th Congress, second session.

COUNSEL FOR THE GOVERNMENT. We object to this report for the reason that the act in question is unambiguous and does not require its legislative history in order to construe.

Which objection the court did then and there overrule, and to which ruling the Government did then and there by its counsel except.

Said report is as follows:

"Section 11 and 12 provide for the acquisition of all private property in the St. Marys River, Michigan, between the present public works and the international boundary line. After full discussion and examination it is the opinion of the committee that the acquisition of all private rights in this stream are essential, in order that the United States may be in a position to utilize this stream for the purposes of navigation. The traffic here is of enormous volume. Additional locks and probably a forebay will be required, and the growth is so rapid that any obstacle in the form of private rights is
359 entirely undesirable. As there is a water power in this stream, a part belonging to the United States and part to be acquired

by the condemnation of the private rights in question, the section provides that this water power may be conserved by the Government and used directly for its own purposes or leased by the Secretary of War."

Counsel for the respondent also offered rules and regulations adopted by the Secretary of War on December 12th, 1902, relative to the permit to the Michigan Lake Superior Power Company to withdrew water from the River St. Mary, and which were assented to by that company, and found in the annual report of the Secretary of War for the year 1905, at page 326, which are as follows:

"Paragraph 8. That said company in its arrangement and construction of remedial works shall leave a suitable channel and water flow for the passage of logs over and through St. Marys Falls.

"9. That these limitations are in addition to the special limitations of the act of June 13, 1902, regarding riparian or other rights of any person or corporation and the remedies therefor."

Respondent offered in evidence contract between the Sault Ste. Marie Bridge Company and William Chandler and Cata O. Chandler, his wife, dated December 9th, 1890, of which the material part is as follows:

"The said Chandler gives and grants unto the company the right to construct and perpetually maintain the embankment aforesaid and its bridge across the St. Marys River, as well as to construct and perpetually maintain side tracks to his land as hereinafter mentioned.

"The said Chandler shall retain all riparian rights and privileges which were vested in him at the date of the said memorandum, subject, however, to the said right of the company to construct and maintain the said works as aforesaid, and he, his lessees, heirs,
360 and assigns, shall also be entitled to make any canal, embankment, or other construction extending from his said land under any span of the said bridge, and of passing, repassing, and laboring thereunder, and of taking material upon and from the said land under the said span, and of doing every other thing requisite and necessary for excavating, erecting, or maintaining any such canal or construction: Provided, That the same shall be such as will not injure the said bridge or its piers or abutments, or the said embankment, and as will not interfere with the use thereof by the company."

Then follows a release of damages, and paragraph 4 is as follows:

"When any mill or factory or other place of business shall be erected on the said land by the said Chandler, his lessees, heirs, or assigns, the company shall, on his or their written request, construct a side track, and shall perform all the work and furnish all the material necessary therefor, extending from its main track upon the said embankment in manner following, that is to say: The company shall bear the expense of the construction of the said side track from its said main track to the land of the said Chandler, and shall also fur-

nish at its own expense the rails necessary for the construction and maintenance of an extension of such side track upon and over the land of the said Chandler to the said mill, factory, or other place of business. The said Chandler shall bear the expense, except for the rails aforesaid, of the construction of the said extension of every such side track upon his land. The company shall thereafter at all times maintain and repair the said side track from its said main track to the land of the said Chandler, and the said Chandler shall thereafter at all times maintain and repair the said extension of the said side track upon his land, and shall allow the company, its successors and assigns, the free use of every such side track or extension as may be constructed on his land aforesaid for all purposes connected
361 with the business of such mill, factory, or other place of business, or of any other to which it may give access, and on demand will execute such further instrument (if any) as may be necessary to convey such free use: Provided, always, that all the railway companies which from time to time shall have the right to use the said bridge shall have also the right to use the said side track or side tracks and extension or extensions, upon equal terms and in manner provided, and subject to the limitations and conditions, as far as applicable, for the general use of the said bridge specified in the act of Congress relating thereto, dated July 8th, 1882."

Said respondent then introduced in evidence a contract between the United States of America and the Sault Ste. Marie Bridge Company, dated the 27th day of September, 1910, being a contract which is a part of the transaction by which the bridge company conveyed to the United States all its interest in the property sought to be acquired by this proceeding. This contract had not been executed by the Secretary of War. The respondents stated that the object of this offer was to show that the Government itself reserved the right for substantially such a railroad upon the property which it is acquiring from the Chandler-Dunbar Water Power Company as the Chandler-Dunbar Water Power Company had with the bridge company previously.

The material parts of which are as follows:

"The bridge company shall, at its own expense, replace the fill in its present bridge structure with a bascule bridge directly over the new canal now being constructed by the United States; such bascule bridge shall allow a clear space over said canal of at least 318 feet.

"The United States shall fill the existing span in the bridge company's bridge next northerly of said bascule bridge from the water to the level of the ties on said span, and the bridge company shall be allowed to remove said span.

"3. The United States shall be allowed to construct an approach to the said fill from the level of the banks of its canal
362 with an opening through the north end of said fill for side tracks. When the said approach and the roadbed for said tracks have been prepared by the United States, the bridge company

shall place thereon the necessary ties and rails, properly ballasted, not exceeding three-quarters of a mile in all, and shall operate the same when desired by the United States at reasonable rates for the services rendered."

Said respondent also offered in evidence House Document No. 385, 56th Congress, first session. This document is a letter from the Secretary of War dated Jan. 29, 1900, transmitting to the House of Representatives a letter from the Chief of Engineers submitting papers relating to the proposed power canal of the Michigan-Lake Superior Power Company, which was on January 30, 1900, referred to the Committee on Rivers and Harbors, and ordered to be printed.

Same contains letter from Lieut. Col. Lydecker, Corps of Engineers, to Gen. Wilson, Chief of Engineers, September 10, 1898, stating that it had come to his knowledge that a corporation therein misnamed but being the Michigan-Lake Superior Power Company had commenced work on constructing what is now the canal of said company. This letter said among other things—

"The normal low water discharge of the St. Marys River is, in round numbers, 60,000 cubic feet per second; and it is represented that the consumption of one-half this amount, or even more, is contemplated by the power company. The effect of cross currents generated in the navigable channel by the outflow and inpour of this large amount of water is an important consideration, as well as the effect on the regimen of Lake Superior."

Same contains—

"Petition of the Michigan-Lake Superior Power Company, of Sault Ste. Marie, Mich., for permission to make, within the limits of the St. Marys River, certain excavations and constructions designed as a part of a hydraulic canal in course of con-
363 struction at Sault Ste. Marie, and to utilize water from said river for the purposes of said canal."

Said petition said among other things—

"Your petitioner further represents that the enterprise of constructing said canal and the appurtenant structures wil' occupy a period of about two years, and that, until the completion of the said work, water cannot and will not be diverted from the St. Marys River.

"It is further represented that, in addition to the works heretofore referred to, your petitioner proposes, as an integral part of said undertaking, to erect in the bed of St. Marys River, between the intake and forebay and in a location where the interests of navigation will not be affected or inconvenienced, such structures as will be required to make proper compensation for the increased outflow of the St. Marys River which will be created by the diversion of the volume of water needed for this hydraulic development and to preserve intact the present levels of Lake Superior and the St. Mary's River."

It also contains report of Board of Engineers, Col. Lydecker, Col. Raymond, and Major Symons, to Gen. Wilson, Chief of Engineers, dated February 23, 1899, as follows:

UNITED STATES ENGINEER OFFICE,
Detroit, Mich., February 23, 1899.

GENERAL: The Board of Engineers constituted by Special Orders, No. 28, Headquarters Corps of Engineers, United States Army, October 19, 1898, as amended by Special Orders, No. 6, January 18, 1899, to consider the project of the Michigan-Lake Superior Power Company, of Sault Ste. Marie, Mich., for the construction of a water-power canal, and to report as to the probable effect of the proposed canal upon the interests of commerce and navigation, has the honor to submit the following report:

The Michigan-Lake Superior Power Company represents that it is duly incorporated under the laws of the State of Michigan,
364 with charter powers (1) to construct and maintain within the limits of the city of Sault Ste. Marie, Mich., a water-power canal from a point above to a point below the rapids of the St. Mary's River, and to own, use, and control the same for the purpose of supplying, upon an agreed rental, water power for manufacturing and other purposes, and (2) to divert into the canal, when constructed, water from Lake Superior or the St. Marys River.

The canal projected under this charter is designed and proportioned to divert and use a constant flow of water amounting, in round numbers, to 32,000 cubic feet per second, the exact amount, as computed by the company's chief engineer, being 31,521 cubic feet. It is freely admitted that the water levels of Lake Superior would be seriously affected if its natural discharge should be increased by anything approaching this amount, and the company therefore proposes to correspondingly reduce the natural discharge by erecting "remedial works" in the St. Marys River at the head of the rapids, the specific project presented for this purpose being a submerged dam of stone-filled cribs, located on the Canadian side of the river.

The blue print hereto attached shows the locations of the proposed canal and remedial works, and also illustrates existing features or conditions, which must be duly considered in this report, the principal ones being as follows:

1. The American and Canadian ship canals, by which all commerce to and from Lake Superior must pass. The freight carried in this commerce during the navigable season of 1898, a period of eight months, was 21,234,664 tons, with a valuation of about $231,000,000. This is an increase of 2,251,909 tons and of about $12,750,000 over the corresponding amounts for the season of 1897.

2. The Lake Superior Water Power Canal (in Canada) is a recent construction, which in its present condition furnishes the power for operating a paper-pulp mill, located at its lower end, and also

365 for generating electricity, which is conducted to and used for operating the company's calcium carbide works on the American side of the river. The amount of water now used is represented as being from 4,000 to 5,000 cubic feet per second, but the canal can easily be made of much greater capacity. This canal increases the natural discharge of Lake Superior by the amount of water that is taken through it.

3. The natural channel north of Whitefish Island (Canadian side) has been adapted and used for water-power purposes by means of a dam erected at its outlet. This is not now in use for that purpose, but the conditions appear to be such as to admit of extensive development without increasing the natural discharge from Lake Superior.

4. The Chandler-Dunbar Water Power Company is the riparian owner on the American side of the rapids from their head for a distance of 3,000 feet downstream. It has made large expenditures for improvements and thereby established a water-power plant which is utilized for supplying electric light and power for local public and private purposes. The company asserts absolute legal right to the use of all water flowing over the rapids between the American shore and midstream without diminution or alteration except as required for the interests of navigation and commerce, and it represents that it proposes eventually to utilize all the flow to which it is entitled. Application for authority to proceed with work having this object in view has been made to the Secretary of War and has been referred to the local United States engineer for report. The proposed development does not contemplate any increase in the natural discharge from Lake Superior.

5. Jurisdiction and control over the waters of Lake Superior and the St. Marys River vest in the United States and Canada, and in the matter now under consideration it is most important that the limiting line to which each holds jurisdiction through the rapids should be definitely known, but the board has been unable to find any authoritative or conclusive location of such line.

366 6. The discharge of St. Mary's River has not been measured at stages corresponding to the high and low water stages of Lake Superior, but from measurements made at intermediate stages it has been deduced that the low-water discharge is about 60,000 cubic feet per second and the high-water discharge about 100,000 feet.

After a full consideration of the existing features and situation as above outlined and more fully detailed in the memoranda herewith marked A, and of all the papers, maps, and information which it has been able to obtain, the board has reached the following conclusions:

The Chandler-Dunbar Water Power Company owns the land on the American side adjacent to the rapids of the St. Marys River, and claims to own and control the use of the water power of the river to the middle of the stream not needed for purposes of navigation. This ownership is asserted to be founded on common law and to be superior to any rights which can be conferred by State statute, such as that under which the Michigan-Lake Superior Power Company is

operating. The ownership of the land on the Canadian side of the river, equally and for the same reason, is believed to carry with it the ownership of the water power of the river and falls to midstream.

If these propositions are true, it is difficult to see where or how the Michigan-Lake Superior Power Company gets any rights to the water power of the river and falls, or how the company can carry out its plans without encroaching on the rights of others. It would seem as if this company should be required to quiet the claims of the owners of the water power under the common law before it proceeds with its work of deflecting the waters of the river into its canal. Otherwise it is reasonable to expect that at some time it might become involved in litigation and possible bankruptcy, and the care and maintenance of its works to conserve the interests of navigation would fall
367 upon the United States or Canada, or upon both countries.

It would therefore appear that the interests of the United States and Canada demand that in any case, before authority to proceed with its work be granted, the company should be required to satisfy the Government that it has a clear and unequivocal title to the water and the right to deflect the same. In this connection attention is respectfully invited to the statement of the Chandler-Dunbar Water Power Company, which is herewith marked "B."

Furthermore, the board begs to state that it has examined the plans submitted by the Michigan-Lake Superior Power Company for the remedial structures required to guard the interests of navigation, and is unable to recommend them for approval for the reason that the works are designed to be located on the Canadian side of the river, in whole or in part beyond the boundary line as this is popularly understood to be, where they would be beyond the jurisdiction of the United States, and the power company has exhibited no authorization from the Canadian Government for their construction or maintenance. And, moreover, the board invites attention to the fact that the plan proposed for these remedial works is largely based upon theoretical assumptions not fully established by observations, and the board is not satisfied that it is the best plan that can be devised for the purpose in view.

For the reasons above set forth the board is unable to recommend the approval of the project submitted by this company.

But other and more important considerations would prevent the board from recommending, under existing conditions, the authorization of any project involving modifications of the rate or volume of the discharge through the present cross section of the free waterway at the head of St. Marys Falls. It is evident that such modifications of the discharge might produce changes in the level of Lake Superior which would seriously injure the navigation interests not only of the United States but also of Canada. The danger of such injuries is greatest in projects proposing diversions of a portion of the
368 flow from the present channel into new ones, diversions which might be made either on the American or on the Canadian side of the falls with the consent of only one of the two Governments

interested in the Lake navigation. If any project modifying the volume or rate of discharge is authorized by either Government, it should be done under conditions satisfactory to the other, and the remedial works necessary to prevent injury to the interests of navigation should be designed, supervised, and controlled under regulations approved by both Governments.

In view of the enormous commercial interests at stake, the board earnestly recommends that action be taken through the proper diplomatic channels for the formation of an international commission, composed of representatives of the United States and Canadian Governments, duly qualified to consider the intricate legal and engineering questions involved, to investigate the conditions governing the discharge of the waters of Lake Superior at St. Mary's Falls and their relations to the lake levels, to formulate the conditions under which the waters discharged may be utilized for the development of power without serious danger of injury to the interests of navigation, to definitely establish the boundary line through the rapids of the St. Mary's River, to determine an equitable division of the water-power privileges of these rapids between the two countries, and to recommend regulations for the guidance of both Governments in granting authority for the execution of projects involving changes in the rate or volume of flow and in providing for the construction, maintenance, and supervision of remedial works; this commission to report fully its conclusions and recommendations to both Governments for consideration and final action.

The board is of the opinion that no project contemplating changes in the rate or volume of the flow through existing cross-section at the head of St. Mary's should be authorized by either Government until international regulations, as above suggested, have been
369 established by both Governments. It accordingly recommends that the petition of the Michigan-Lake Superior Power Company be not granted.

Respectfully submitted.

C. J. LYDECKER,
Lieut. Col., Corps of Engineers.
C. W. RAYMOND,
Lieut. Col., Corps of Engineers.
T. W. SYMONS,
Major, Corps of Engineers.

Brig. Gen. JOHN M. WILSON,
Chief of Engineers, U. S. A.

Said letter was also accompanied by memoranda compiled by Lieut. Col. Lydecker for the use of the board, stating, among other things, the following:

"The condition of affairs now existing at the falls of the St. Mary's River, briefly outlined, is as follows:

* * * * * * *

"(2) Adjoining the Canadian ship canal is a water-power canal recently constructed by the Lake Superior Power Company, the

capacity of which is reported to be about 4,000 to 5,000 cubic feet per second in its present condition; but this capacity may be greatly increased.

"(3) The channel north of Whitefish Island (Canadian side) has been adapted and used for water-power purposes by damming the outlet. This is not now in service, but it is easily susceptible of an extensive development.

"(4) The Chandler-Dunbar Water Power Company is the riparian owner on the American side of the rapids from their head for a distance of about 3,000 feet downstream. As such riparian proprietor the company asserts title to the middle of the stream and claims absolute legal right to its corresponding natural flow, without diminution or alterations except as required for the interests of navigation or commerce. It has made large expenditures in improvements for developments, supplying the electric light and power required for local public and private purposes. The company represents that it proposes to make much more extensive developments in the near future and to eventually utilize all the natural flow to which its
370 riparian ownership gives it legal right and title. Application for authority to proceed with this development has already been made to the Secretary of War.

"(5) The discharge of the St. Mary's River has not yet been measured at stages corresponding to the high and low water stages of Lake Superior, but from measurements made at intermediate stages it has been deduced that the low-water discharge is about 60,000 cubic feet per second and the high-water discharge about 100,000 feet. The canal which the American Lake Superior Power Company proposed to build is designed to discharge about 32,000 cubic feet per second."

Such memoranda concluded with general remarks, including the following:

"3. The canal is designed to divert more than one-half of the natural low-water discharge from Lake Superior, and it is proposed to diminish the flow through the natural channel, via the rapids, by the same amount. Can this be done without seriously conflicting with the rights of property fronting on the rapids? The act of the State of Michigan, under which this water-power company is incorporated, purports to give it the right 'to divert waters from Lake Superior or St. Marys River, * * * subject to the consent of the board of supervisors of the proper county in which said waters so diverted are situated.' But this can hardly be construed as authorizing the company to erect works in the bed of the river, remote from their own property, and thereby prevent a like amount of water from continuing to flow by, or over, another person's property without his consent.

"4. The St. Mary's River being the boundary between the United States and the Dominion of Canada, it is presumed that each country has proportionate jurisdiction concerning the use and control of its waters. The uncertainty respecting the location of the territorial

boundary line is referred to in paragraph 6 of the above memoranda; but does the location of this line determine the volume of water which each country would control for water-power purposes, or is each country entitled to an equal division of the total water-power flow, independently of how that flow is divided by the territorial boundary line?"

371 Said letter was also accompanied by letter of Jos. Ripley, assistant engineer to Col. Lydecker, dated Oct. 4, 1898, stating among other things:

"It seems to me that a board of United States and Canadian engineers should be appointed to study and determine the structures necessary to maintain the present normal stage of Lake Superior. It is probable that a system of submerged weirs and movable dams will be necessary, and their probable location will be at the head of the rapids and possibly the main part of them on the Canadian side of the river. Also, the question of the extent and character of development which will be permissible in the rapids should be decided at this time, otherwise the question of the partial development of the power in the rapids will be an ever-recurring one."

Said respondent further offered in evidence order of Secretary of War, made the 12th day of December, 1902, and read into the record this part:

"Now, therefore, this is to certify that the Secretary of War hereby approves the said plans (relating to the Michigan-Lake Superior Power Company's plans) which are hereto attached, and hereby gives his consent to the diversion of water from the St. Mary's River, as authorized by said act, subject to the acceptance by said company of the following conditions:" The first we will pass. "Second. That when the mean level of Lake Superior at the canal for any calendar month falls below 601.5 feet above mean tide at New York, according to the levels of the United States Lake Survey Office, the flow through the canal shall be reduced; the amount of reduction increasing as the monthly mean level falls, until it reaches 601.0, when all flow shall be stopped until the monthly mean level again exceeds 601.0, all without claim against the United States or against any officer thereof.

"3. That in addition to the requirements of condition 2 (supra) all flow shall likewise be stopped without claim against the United States or against any officer thereof.

"Should the mean monthly level of the lake remain below 601.5 for a period of six consecutive calendar months, and shall not
372 be resumed until the monthly mean level shall exceed 601.5.

"4. That when the monthly mean level rises about 603.0 the flow through the canal to the remedial works shall be increased to their maximum capacity and shall so continue until the monthly mean level shall be less than 603.0 without claim against the United States or against any officer thereof."

To the same point, from the report of the existing conditions at Sault Ste. Marie, by the International Waterways Commission, dated May 3rd, 1906, on page 17, paragraph 4. Recommendations:

"The level of St. Mary's River above the rapids shall be maintained between the elevation 601.7 and 603.2 feet above mean tide at New York, according to the system of levels established by the United States Government in 1903, and defined by a bench mark on the coping of the Weitzel Lock, at Sault Ste. Marie, Michigan, the elevation of which is 606.069. The approval of the plans of work by the commission and the consent of the Secretary of War and minister of public works to construct works or to use or divert water shall in no way relieve the owners and persons operating such works from the duty of maintaining said level."

Said respondent then offered in evidence chapter 88 of the Laws of Ontario for the year 1889 (p. 310), the material parts of which are as follows:

"Chapter 88.

"An act respecting the Ontario and Sault Ste. Marie Water, Light and Power Company and the town of Sault Ste. Marie.

"Whereas the Sault Ste. Marie Water, Gas and Light Company had been incorporated * * * for the purpose of supplying the municipality of the town of Sault Ste. Marie with both water and light, and the council of the corporation of the town of Sault Ste. Marie have passed the several by-laws and entered into the several contracts and agreements * * * and whereas the said company alleges that it will materially assist them in carrying out their said contracts with the said municipality, and enable them to sup-
373 ply both water and light at much lower rates, if increased powers be granted to them, to enable them to avail themselves of the water from the rapids of the St. Mary's River for power and other purposes generally, as well as for water works, and water, and light purposes; and whereas * * *

* * * * * * *

"Therefore, Her Majesty, by and with the advice and consent of the Legislative Assembly of the Province of Ontario, enacts as follows:

"1. The name of the Sault Ste. Marie Water, Gas and Light Company is hereby changed to, and the said company shall be hereafter known and designated as, the Ontario and Sault Ste. Marie Water, Light and Power Company.

* * * * * * *

"4. After having acquired the land or property necessary for the carrying out of the works hereinafter mentioned, the company shall have the power to erect, construct, and maintain a dam or dams across the inland channels or rapids of the St. Marys River, or of any branch thereof within the Province of Ontario, and also to conduct water from the said river and the various branches thereof, and streams entering therein by canals or flumes to be made by the company at any place on the said rapids along the shores thereof for hydraulic purposes, and may also construct all necessary locks, piers, wharves and other works on the canals, and may extend its works

into, and take possession of the bed and beach of the said St. Marys River at the entrance of the canals or flumes, and for the foundations of the same in their entire length, and at any point at which it may be found expedient to provide an outlet or outlets for the waters of the canals or flumes, or tail-races for water-powers taken from the said canal or flumes; * * *

"7. The company may use, sell, lease, and otherwise dispose of the surplus water from the dams, flumes, raceways, or canals which it does not require, but which might be found useful and applicable to drive any machinery in mills, warehouses, and factories, and may purchase, acquire, hold, or possess lands along the sides of the flumes, dams, raceways, or canals on either or both sides
374 thereof, and down to the river, and may sell, dispose of, or let and lease the said lands with or without water-power, on such terms and conditions as they may think fit."

Said respondent then offered in evidence chapter 119 of the Laws of Ontario for the year 1895 (p. 681), the material parts of which are as follows:

"Chapter 119.

"An act respecting the town of Sault Ste. Marie, the Ontario and Sault Ste. Marie Water, Light and Power Company, the Lake Superior Power Company, and the Tagona Water and Light Company.

* * * * * * *

"6. The name of the Ontario and Sault Ste. Marie Water, Light and Power Company is hereby changed to, and the said company shall hereafter be known and designated as, 'The Lake Superior Power Company,' and the said company shall have perpetual succession."

This respondent introduced in evidence respecting Portage Street the decision of the Commissioner of the General Land Office on the application of Wm. B. Cady to enter the part thereof herein involved:

On Dec. 6, 1901, Wm. B. Cady applied to enter the part of Portage Street, so called, north of the canal and other parcels with Porterfield scrip. His application was rejected on May 15, 1902. Thereupon he made motion for a review of the decision by the Commissioner of the General Land Office, which motion to review was denied on August 13, 1903. In denying same, the commissioner said:

"By the decision of this office 'C' of May 15, 1902, the said applications were rejected upon the grounds (1) that the tract above described as the extension of Portage Street was, by the proceedings under the act of September 26, 1850 (supra), dedicated by the United States to the village of Sault Ste. Marie for public uses as a street, and such dedication divested the United States of all title to the land; that the land embraced in the street, as represented on said map, was not public land and not subject to location."

* * * * * * *

375 "The applicant's contention on this point, briefly stated, is understood to be, that while the act of September 26, 1850

(supra), authorized the survey of the land into 'town lots, streets, avenues, public squares, and out-lots,' and made provision for the disposal of the lots, it made no express dedication of the streets authorized to be laid out; that there would arise the implication of such dedication only where lots were laid out upon the street and disposed of, and to the use of which lots the street would be necessary; that no such lots as provided for by the act were surveyed and sold north of the St. Marys Canal reservation, and therefore that the use of Portage Street, north of said canal reservation, was not dedicated, but the fee as to it remains in the United States.

"In this the applicant appears to have been led into the error of fact. The 'Whelpley map,' and the records of this office show that, abutting upon the south side of this portion of Portage Street the land was laid off into: Lot No. 3, marked 'U. S. vacant;' a part of claim No. 4, claimed by John P. Richardson, and a part of claim No. 5, claimed by Charles Bacon. The lot No. 3 was sold at public sale to Thomas R. Easterday, trustee, July 27th, 1874, certificate No. 2, and was patented to him May 24, 1879. The claim No. 4 was patented to John P. Richardson, April 10, 1882, and the claim No. 5 was patented to Charles Bacon March 16, 1874. The land abutting upon the north side of that part of Portage Street, and lying between the street and the river, was represented on the 'Whelpley map' as 'Part of the Indian reservation.' But that entire tract was located by William Chandler with Porterfield scrip No. 123, May 17, 1881, and patent issued to him therefor December 15, 1883. Thus all the land on both sides of that part of Portage Street, and abutting upon it, has been disposed of in accordance with the survey, and with relation to the street, and the facts exist which the applicant admits would create a dedication by implication.

"But aside from this, the said act of September 26, 1850 (supra), authorized the survey of the land into 'town lots, streets, ave-
376 nues, public squares and out-lots,' and, if there is in the language of the act no specific dedication of the streets, I am satisfied that the acceptance and approval of the plat of the survey, and the passing of title to the subdivisions as represented upon it, amounted to a dedication of all streets, thereupon laid down, to the public use, and was such an appropriation of the land as would bar the United States from otherwise disposing of it."

To further maintain the issue on its part, the said respondent, Chandler-Dunbar Water Power Company, called as a witness WILLIAM CHANDLER, who testified as follows:

"Permits were all revocable at the pleasure of the Secretary of War; but I looked the matter up, and I could not find that any had ever been revoked, but I have found some now. I found in all my dealings with the department that it was that or nothing."

Said respondent also identified and offered in evidence a letter of February 22, 1906, relating to the quitclaim deed to the United States and railroad right of way and conduits for carrying electric current.

COUNSEL FOR THE GOVERNMENT. We object to this letter, because the deed which accompanied the letter was not accepted by the Government, and for the further reason that any contract such as it is claimed this correspondence made was ultra vires; and for the further reason that if the Chandler-Dunbar Water Power Company has any valid contract with the Government, its remedy for a breach of that contract would be in the Court of Claims, and any damage for breach of contract, if a valid contract exists, cannot be awarded in this proceeding; and for the further reason that no officers of the Government possessed the power to make a contract giving the Chandler-Dunbar Water Power Company any vested right or interest to any license, way, or easement over reserved lands, and there being no act of Congress authorizing that contract, it is void on its face.

Which objection the court did then and there overrule, and to which ruling the Government did then and there except.

Also letter of April 24, 1907, and letter of May 3, 1907.

377 Said letter of February 22, 1906, is as follows:

FEBRUARY 22ND, 1906.

Mr. JOSEPH RIPLEY,
General Supt. and Engineer in Charge,
St. Mary's Falls Ship Canal,
Sault Ste. Marie, Michigan.

DEAR SIR: I am in receipt of your communication of the 10th inst., in reply to mine of the 8th inst., together with the blue print, to which reference is made, in which you ask for a very large increase in the amount of land deemed necessary for the possible Government requirements. Your previous request was for 5.372 acres, and you now want 8.75 acres.

The blue print showing a study for the location of proposed locks, revetment piers, etc., indicate that your request may not be an unreasonable one; therefore, the Chandler-Dunbar Water Power Company will make a conveyance of the tract described as containing 8.75 acres, more or less, to the United States, upon practically the same terms as outlined in my previous correspondence, excepting and reserving, of course, all the riparian rights outside of the lines of the lands conveyed.

Upon the lands you desire is located our railroad siding track, connecting our works and proposed works with the main line of the Canadian Pacific Railroad. We should desire the United States to construct an embankment for a new siding to take the place of the one now there, and to remove the railroad siding to the new location made necessary by the change proposed. The new location of the track would of necessity be partly on the west of the present Canadian Pacific Railroad embankment, the making of which would require quite a fill. This, I understand, could be done quite advan-

tageously for the refuse of the proposed canal excavation. We should desire that the exterior limits of this fill, where the depth of water is such as to require it, should be retained in position by cribwork. We would also desire the Government to extend our steel conduit for electric cables across the land conveyed, or such parts of it as the construction work of the Government would require, and put the same in condition for use.

378 We would also desire to occupy the lands so granted, not immediately required by the Government under lease for nominal rent, until such time as this company can get its works now under construction farther out in the river completed, and until the land is required for Government purposes, and also the right to remove any of our buildings from the same.

I enclose you a deed covering the land you describe as necessary for canal purposes, properly executed by the Chandler-Dunbar Water Power Company conveying the same to the United States of America.

Very respectfully,

THE CHANDLER-DUNBAR WATER POWER CO.,
By WM. CHANDLER, *President.*

The letter of April 24, 1907, is as follows:

UNITED STATES ENGINEER OFFICE,
Sault Ste. Marie, Michigan, April 24, 1907.

Mr. WM. CHANDLER,
Prest. Chandler-Dunbar Water Power Co.,
Sault Ste. Marie, Mich.

DEAR SIR: I have received your letter of April 17th, declining to return the quitclaim deed offered to the United States in February, 1906, on the ground that conditions have materially changed since that time. Your offer, however, to submit a proposition by which the lands actually needed for the widening and improvement of the canal under present plans will be conveyed to the United States, is noted and in accordance with your suggestion I enclose herewith a blue print map showing such lands, the description of which by metes and bounds is as follows:

All those certain pieces or parcels of land situated in the city of Sault Ste. Marie, county of Chippewa and State of Michigan, forming parts of private land claims No. 95, No. 96, north part of claim No. 3, northeast part of claim No. 3, part of claim No. 4, and part of claim No. 5, village lot No. 3, and part of the Indian reservation, described as follows, to wit:

Beginning at the intersection of the north boundary line of
379 the canal reservation with the principal meridian of Michigan, thence along said boundary line of canal reserve, as determined by the Whelpley survey of 1854–5, N. 85 degs. 23′ E.

2,449.26 feet (to the easterly boundary of the Chandler-Dunbar Water Power Company's lands), thence S. 89 degs. 40′ 21″ W. 1,821.50 feet, thence S. 85 degs. 23′ W. 557.1 feet, thence S. 89 degs. 40′ 21″ W. 601.91 feet, to the westerly boundary of claim No. 95, thence along westerly boundary line of said claim S. 45 degs. 13′ W. 95.14 feet, thence S. 74 degs. 54′ E. 276.54 feet, thence S. 87 degs. 16′ E. 207.9 feet, thence No. 85 degs. 23′ E. 130.68 feet to the place of beginning, containing 6.52 acres, more or less.

In connection with your proposition, will you also please submit such information as you may have regarding any incumbrances on the title to the land in question which you have not been able to clear.

Yours, very respectfully, (Sd.) L. C. SABIN,
Assistant Engineer.

1 enclosure.

The letter of May 3rd is as follows:

(The Chandler-Dunbar Water Power Co., Sault Ste. Marie, Mich. Wm. Chandler, pres.; H. T. Dunbar, vice pres.; S. G. Carlton, treas.; D. B. South, secy.)

MAY 3RD, 1907.

Mr. L. C. SABIN,
Assistant Engineer,
Sault Ste. Marie, Michigan.

DEAR SIR: I beg to acknowledge the receipt of your letter of April 24th, 1907, with enclosure, asking for the submission of a proposition under which such lands as are now needed for the widening of the St. Mary's Falls Ship Canal according to present plans, would be conveyed to the Government.

In reply I would say that the lands described in your letter, and shown on the blue print accompanying the same, will be conveyed to the Government substantially in accordance with my com-
380 munication of February 22nd, 1906, which was accompanied by a deed which was not accepted. Conditions have, as you are aware, changed since the former deed was tendered and declined, which render some changes in the conditions of acceptance of such conveyance desirable.

I herewith enclose you a quitclaim deed for the nominal sum of one dollar, running to the United States for the lands at present desired for canal widening, for your consideration.

Should the deed be accepted I desire that the steel conduit running under the present canal and conveying the transmission lines of the Edison Sault Electric Company should be extended beyond the width of the widened canal to the south boundary of our land, at the expense of the Government, and to use and make necessary repairs on the said conduit.

The width of the land covered by the enclosed deed, as shown on the map, takes away our railroad siding and renders it impossible to bring down the siding upon our remaining lands. Therefore, I desire the Government shall provide the proper fill and grade or trestle for the shortening of the present curve and transfer the present railway track and provide for carrying the tracks of the Edison Sault Electric Company and of this company near the lower end of the property; and that these companies be allowed to maintain and use the tracks in this position until such time as the construction of the proposed new canal to the north renders the land thus used necessary for canal construction, at which time the track may be removed. It is understood that the Government, for its own use, shall have joint use of the said track. The shortening of the curve above noted will prevent a railroad engine running over this siding. It would therefore be necessary to provide for the erection of a trolley line over the track and for the movement of the cars both to and from the main line with an electric trolley car. In the erection of the trolley line the Government shall erect the poles and the Chandler-Dunbar Water Power Company put on the trolley wire.

Looking forward to the possibility of the Government in
381 the near future acquiring lands for the construction of a new canal to the north of the present one, which would take all the main londs of this company not under water, I desire that the Government should, with the material excavated from the lands conveyed by the accompanying deed, fill a tract of our submerged lands to the west of the international bridge and to the north of the line bounding the lands needed for the proposed new canal, that there may be some land to which may be removed our warehouse building and upon which a new railroad siding may be constructed. This fill should be constructed upon the river side, with piers made of timbers or of selected stone, so that the action of the water would not wash down the slope of the shore and carry the material in to our forebay. If the slope is made of stone, it should be of material that will stand at a slope of one to one. The approximate territory covered by this proposed fill is shown upon the blue print accompanying this letter.

Regarding your request for information in reference to incumbrances on the title to the land, I would say that I believe we have a good title to all the land that the Chandler-Dunbar Water Power Company claims to own, although not a title that is unassailable. We only claim to own an undivided one-half interest in the part of private land claim No. 3, lying north of the St. Mary's Falls Ship Canal. There will be found a lis pendens on private land claims Nos. 95 and 96. The title to these tracts of land has been decided twice in our favor by the circuit court for the county of Marquette and once by the Supreme Court of the State. There possibly may be some questions regarding the title to a small interest in private

land claim No. 4, lying north of the ship canal, and I believe the title is good. However, I would suggest that the United States attorney, should the question of these titles be referred to him, confer with the attorney of the company, Mr. J. H. Goff, Union Trust Building, Detroit, who has gone into these titles exhaustively, and whom, I am sure, will give all the information in his power. There is also a suit pending in the United States courts between the United States and the Chandler-Dunbar Water Power
382 Company which reflects upon the title of the so-called Indian reservation. As this suit has already been decided by the United States district court and the United States Circuit Court of Appeals in our favor, I cannot but think that the title is reasonably good to this portion of the land conveyed.

Respectfully,

CHANDLER-DUNBAR WATER POWER CO.,
By WM. CHANDLER, *President.*

WITNESS (continuing). To this latter letter was attached a quit-claim deed from the Chandler-Dunbar Water Power Company to the United States, which deed was not accepted by the United States, and another deed was made to take its place, which deed is Exhibit 11–A. The same covered the land south of the yellow strip on the large map.

The Attorney General objected to the deed attached to the letter, owing to the fact that he was afraid that accepting the deed as it was first prepared might militate against the United States in its suit against the Chandler-Dunbar Water Power Company questioning the title of these lands, the main lands and islands. The Attorney General then prepared a paragraph to insert in the deed which he deemed necessary to protect the interests of the Government, and that was accepted by us, and a deed prepared in accordance therewith and substituted for this deed, which substituted deed was Exhibit 11–A. There was no change in the terms upon which the United States accepted that deed.

Map Exhibit 17, shown witness, showing the properties of the Chandler-Dunbar Water Power Company and the Edison Sault Electric Company and related constructions, and the witness testified:

The land north of the line dotted in black across the map is the land which the Government was to build for a railroad track and warehouse site for the Chandler-Dunbar Water Power Company. The Chandler-Dunbar Water Power Company had correspondence with Gen. Davis, the predecessor of Col. Townsend, in charge of the Government works at Sault Ste. Marie, with reference to this transaction, which resulted in the deed to the United States. I don't remember the date of the correspondence, but it was before May 3rd, six months or a year before.

383 Respondent, subject to the objection, ruling, and exception heretofore noted, offered in evidence a letter dated January 2nd, 1908, which letter is as follows:

WAR DEPARTMENT,
UNITED STATES ENGINEER OFFICE,
Jones Building, Detroit, Mich., January 2, 1908.

Mr. WILLIAM LIVINGSTONE,
President of Lake Carriers Association,
Detroit, Michigan.

SIR: In answer to your telephone inquiry of December 31st, 1907, as to the present status of the widening of the upper canal at Sault Ste. Marie, Mich., I have to say:

1st. The river and harbor act of March 3, 1905, authorized the expenditure under continuing contract of $1,020,000.00 for widening the upper entrance to the present canal, in accordance with the project submitted in House Document No. 215, 58th Congress, 3rd sessoin. Of this $1,020,000.00 there remains to be appropriated $250,000.00. This money was to be expended in rock and earth excavation, concrete revetment walls, timber, piers, filling, movable dams, including head gates and superintendence and inspection, all in accordance with the project above mentioned.

2nd. Negotiations for obtaining the land needed for the widening began at once, but as a suit was pending in the United States Circuit Court to quiet title to Islands Nos. 1 and 2, owned by the Chandler-Dunbar Water Power Company, the Department of Justice advised that no steps be taken to acquire the land until this suit was decided, so the season of 1905 was wasted. In November, 1905, I opened up the question of the land needed, and on March 5, 1906, I obtained a quitclaim deed for the nominal consideration of one dollar, and Mr. Chandler was notified March 21, 1906, that the War Department accepted the deed. The deed was returned August 8, 1906, with the opinion of the Acting Attorney General, who found various
384 incumbrances. These incumbrances were purely technical, and much time and money were expended by the Chandler-Dunbar Company in the effort to remove them, but unsuccessfully, and another season's work was lost.

Finally, a second quitclaim deed was prepared for the same nominal consideration and forwarded to Washington May 10, 1907, but was not acted upon by the Department of Justice until November 25, 1907, and then unfavorably, and the papers have only recently been received back by me. So a third season has passed and we are apparently no nearer a settlement of this question than we were at first, so far as the Department of Justice is concerned.

In anticipation of a speedy decision in the matter, for it seemed to me it would be looking a gift horse in the mouth to raise technical points against a gift of very valuable property for which the Govern-

ment might have been asked a large sum of money, I prepared specifications for the widening in May, 1906, and bids were opened July 24th of the same year. Six bids in all were received, ranging from $957,200 to $552,530. As the lowest figure was an exceedingly favorable one for the United States and within the estimates, I recommended its acceptance.

August 3, 1906, the engineer department notified me that action on my recommendation would have to be deferred until the question of title was settled. The successful bidders were notified of this decision, and as no settlement was reached all bids were rejected September 24, 1906. In the meantime a good deal of work has been done, a coffer dam has been built around the portion of the work that can be done in the dry, the concrete abutments and foundations for the movable dam—estimate to cost $400,000—have been completed as far as they can be before the erection of the steel swing bridge forming the dam proper, specifications for the steel work prepared, and probably the bids for this work will be colisicted in February next.

3rd. The condition of the appropriation is in round numbers as follows:

	On hand from previous appropriation	$308,000
885	Already appropriated	770,000
	Yet to be appropriated	250,000
	Total	1,328,000
	Expended up to date	179,360
	Balance	$1,148,640

You will therefore see that so far as this office and the Engineer Department are concerned every effort has been put forth to start this important public improvement.

You are at liberty to publish this letter in full; in fact, I should prefer it rather than a brief summary.

A copy of this letter has been sent to the Chief of Engineers.

Very respectfully,

CHARLES E. L. B. DAVIS,
Colonel, Corps of Engineers, U. S. A.

Counsel for respondent stated: The purpose of this letter is to give a history of the deed, leading up to the deed which was finally accepted by the United States, and it also may have a bearing on the construction of the act of Congress.

The respondent, subject to like objection, ruling, and exception, then introduced letter of September 18, 1909, which letter is as follows:

SAULT STE. MARIE, MICH.,
Sept. 18, 1907.

Col. CHARLES E. L. B. DAVIS,
Corps of Engineers, U. S. Army, Detroit, Mich.
(Through L. C. Sabin, assistant engineer, Sault Ste. Marie, Mich.)

SIR: We have your letter of July 23, 1907, wherein you request the Chandler-Dunbar Water Power Company to state on what terms

it is willing to deed to the United States the land needed for new canal and new lock, viz, the land northward, toward the St. Marys River, exclusive of the land already deeded for this widening, and including land, which, as you intimate, will be required in the future for the construction of another lock.

The Chandler-Dunbar Water Power Company and its predecessor in title have, for twenty-five years, been willing to give to the
386 United States their main lands and so much of the adjoining subaqueous lands for navigation purposes as could be parted with while retaining the appurtenant water power and a suitable seat for the improvement and use of the same. During this time extensive and valuable improvements have been made on the lands now desired by the United States. In parting with these improvements, the United States will be asked to provide for the duplication of the same as near as may be farther out in the river, and otherwise compensate for such available improvements as can be duplicated; or, in other words, as nearly as possible under the new conditions now contemplated, to place us in as good a position as our legal rights and our equities entitled us to be at present.

In consideration for the lands desired, which are very valuable to us for water-power purposes on account of their riparian rights, authority will be asked to excavate tailraces in the St. Marys rapids below our property of sufficient capacity to carry water from any water-power machinery we may install.

Respectfully,

THE CHANDLER-DUNBAR WATER POWER CO.,
By WM. CHANDLER, *President.*

Respecting the alleged protest of the Chandler-Dunbar Water Power Company against the valuation for taxation of its property by the assessors of the city of Sault Ste. Marie, both Wm. Chandler and Harris Dunbar testified that they were the persons having in charge the affairs of the Chandler-Dunbar Water Power Company and of all its affairs so far as they knew. That the alleged protest against the valuation of their property was not authorized by them or either of them, or by any person having authority to authorize such protest on the part of the Chandler-Dunbar Water Power Company. That Mr. Kingen, who made such protest, was not an officer or employee of said company or authorized to employ any attorneys to make such protest, and that the firm of Oren & Webster were not authorized to make such protests by anyone having authority of said company. But, on cross-examination, Mr. Chandler testified that Oren & Webster were their general retained attorneys at time of making and filing said protest by them.

L. C. SABIN was recalled by the respondents for further examination.

I am the United States assistant engineer in charge of the Government works at Sault Ste. Marie.

Q. Have you a plan for the improvement of the river made since the taking of the property to the international line?

(To which counsel for the United States objected, as being irrelevant and immaterial to this issue, for the reason that any action of the War Department in the making of plans or otherwise, with reference to this property, since the date of the taking, can have no effect upon the condemnation proceedings; and as to what has been done by the engineers along the line of the inquiry this question indicates has no bearing upon the necessity or as to its effect upon its
387 construction of this act. This objection to apply to all testimony of this class.

Which objection the court overruled, and to which ruling counsel for the United States duly excepted.)

And thereupon the witness answered as follows:

I have a plan for the improvement of the river in respect to water power made since the taking of the property, plans for building a headrace from the bridge downstream to about opposite the present plant of the Edson Sault Electric Company, forming a headrace, which may be used for taking the water to the present power plant of the Edison Sault Electric Company, and for filling locks and other things of that sort. I have a map showing these plans.

(Map introduced in evidence by defendant and marked "Defendant's Exhibit 29.")

That plan represents a sheer dam or wing wall or dike running from about the north end of the present Edison Sault improvement northwest to a point a few hundred feet above the railroad bridge. It strikes the railroad bridge at the fourth pier above the abutment. The plan for this work includes this headrace and many other things, a new navigation canal west of the bridge, building of side walls and timber pier out beyond the limits of this map. The total amount to be paid is five or six hundred thousand dollars. We don't know how much excavation will be removed in this area marked "New headrace." It wasn't a flat bid to do the business, but a bid by the cubic yard; cubic yard of excavation, 80 cents, I think. Construction of dikes, $8.50 per linear foot. It was in my mind in my original plan for this work that it should be used to a certain extent for navigation. The idea of this development is to permit power to be developed in the Edison Sault power plant, but before saying that I will say that it was intended to use this power plant to operate the locks, a portion of it. There is also the possibility of using this new headrace as a forebay from which to fill the new locks, but this plan does not indicate it. This plan simply shows this headrace that is under contract. We are not ready to connect that headrace
388 with the locks, and may never do so, but that might be developed. The locks could be supplied from the navigation canal as the present locks are supplied, but the question has arisen whether supplying large locks of that kind from the navigation canal, whether it would produce currents which would be deleterious to navigation interests.

The passage of logs over the rapids would be considered navigation, and the regulation of Lake Super and St. Marys River would be called works of navigation. It takes 1,600,000 cubic feet for each lockage of the Poe Lock. Considering that the fall is 20 feet, a variation from 19 to 20 feet, the number of lockages in 1909 was about 5,000; that means the number of times that the locks were filled or emptied with boats on them. If the traffic were always alternated, one boat up or one lock full of boats up and then a lock full of boats down, we would have one emptying of the lock for each two lockages. As a matter of fact, the traffic is not so regulated, and I should think that between two-thirds and three-quarters of these 5,000 lockages would be a fair number to take in figuring the amount of water consumed; so that it would be 1,600,000 cubic feet multiplied by 5,000 lockages, multiplied by two-thirds or three-quarters. It is not possible to give that without a good deal of work to get that accurate. The volume per second for the time of navigation I could only give within wide limits; I haven't it in my mind, and I have not my notes. I have computed it, but it is not even in town. Other than the operating of the locks, land and water might be required for regulating works, regulating the levels. That would be called a cross dam across the river, or it might be a dike diverging from the American side to the Canadian side. I believe it is practical to build works in the rapids so as to control the outflow of Lake Superior and equalize the flow.

The COURT. You include, perhaps, with the concurrence of the Canadian Government?

Mr. HOOPER. Yes, sir; their works are already in.

A. If you include excavation in the term construction it would, I think, be possible to equalize the flow. I think excavation
389 would be necessary in order to increase the available discharge area at times when the water went extremely low, because an equalization of the flow would mean a very great disturbance of levels, and the water level to equalize the flow would go lower than it does at present. If I were going to design such works, I should try to find out how much had been the average flow out of Lake Superior for the last 40 or 50 years, or as long as I had records, and plan my works to pass that flow at any stage which such a flow might give to Lake Superior, and in order to do it I would have to excavate at the head of the rapids, I think. I don't say it would be physically possible for an engineer to say to-day what flow he would have to provide for in order to forever afterwards have it that the flow from Lake Superior should be the same, but he could arrive at it approximately by knowing the conditions that had prevailed in the last 50 years. If the flow must be increased over the amount which he had arrived at as a mean, then the proposition fails, and he has not equalized the flow. Arrangements might be made by excavation so that extraordinary amount of water might be discharged if that emergency arose. During the last season of navigation the greatest amount of freight passed through the Sault locks—I mean the season of 1910—

62,363,218 tons. A lock of the capacity of the new third lock would take a space of about 150 to 200 feet in width. The distance between the possible fourth lock and the international boundary line is about 1,200 feet. Remedial or intercepting works might be located at various points along the rapids, and they would consist of a dam with openings through it and gates to control the flow of water through those openings. I don't know that you would say that was the natural thing to carry a cross dam from the head of the wing dam or dike to the Canadian intercepting works. It could be done that way. Such a dike might be carried across either there or downstream from there out to the location of what we call the east line of the Chandler-Dunbar property. If you carried a dam across at the east line of the Chandler-Dunbar property, you would have to build a heavier wall.

You would be in deeper water or a lower level. In addition to
390 that, you would have from the north end of your dam to carry up a wing wall or dike to the Canadian works. It would be the cheapest plan to carry the wall directly across from the head of the proposed dike to the Canadian works, but it might be advantageous to put it lower down to save excavation. The lower one would save excavation and the upper one would save masonry. To some extent the works would operate as compensating works to the draft of the water through the Michigan-Lake Superior Power Company's canal. If the full amount of water which would ordinarily flow through the spans included in the headrace were not taken through that headrace, then to that extent they would be compensating works for water taken at other places. The only power development at present on the American side are the Edison Sault and the Michigan-Lake Superior. I don't remember what the letters indicated respecting the quitclaim deed so as to furnish a foundation for a railroad track. Supposed that it had been made about as indicated in those letters. At the same time it is not sufficient at present to make a railroad siding, but there is no practical difficulty in filling it to that extent and putting the railroad siding on it.

(Respondent's counsel produced a map marked "Respondent's Exhibit 17.")

The yellowish strip on this map probably indicates the land purchased from the Chandler-Dunbar Company for the canal widening covered by that quitclaim deed. The narrow red lines indicate a railroad which has been in existence in the past at one time or another. It would be possible to put a railroad track on the line represented by the double black line. There are no physical conditions that I know of that would interfere with its construction. It would not be expensive to make that filling in shape for a sidetrack. If the property north of the strip claimed by the United States had not been taken, it would have been practicable to have put on a sidetrack for cars to any point in the rapids north of the Edison Light Company's plant without interfering with any Government property which was then Government property. I mean that railroad that you have

pointed out here about on the line indicated by this double black line.

391 On redirect examination, the witness testified:

The Poe Lock is built with six large culverts under the floor, and when these culverts are opened and the lock is empty the first flow of the water under a 20-foot head is very rapid, and gradually decreases until the level is equalized in the chamber. The rate of discharge when the lock is first opened I should say is about 4,000 cubic feet a second, and the other locks in the proportion I have already testified to. I think that embankment price is a fair bid. The price for excavation in the forebay is very low—80 cents a cubic yard. My estimate was $1.50 for rock and earth combined.

My understanding of the question of equalizing the flow, and the sense in which I answered it, I should say that if you equalized the flow it would have a very serious effect on the levels of Lake Superior. If you regulate Lake Superior at a given stage, or between narrow limits, if you decrease the limits you increase the fluctuation of the discharge. To equalize the flow, it would be necessary to excavate there by the international bridge. The place where you would excavate is the natural dam which holds Lake Superior.

Recross-examination:

Q. Is it your judgment that with the 35% increase over the 15,000 cubic yards estimate that you made, that this forebay will carry the water necessary to operate the nine wheels?

A. That would depend on the level of the water above and on the physical conditions as regards ice and things of that character whether that excavation would be sufficient. It was my judgment at the time that it would, but I have changed my mind. I think the conditions are not quite as good as I expected they were when I made the plan. The change in my opinion arises from lower stages of water than had been prevalent and a higher elevation of rock than I had expected—required more excavation. The conditions this winter in regard to ice and low water have been exceptional—have indicated that a larger headrace was required than we had thought before.

Alex Dow testified: Referring to the plant now operated by the Edison-Sault Company, its power house is not completed; its power production can be added to materially by adding such business as can be had during the hours outside of the evening lighting hours; as to increases of capacity beyond the present capacity, the increase of power-house capacity can be made quite cheaply, because the plant is partially completed for a very considerable increase, and it is arranged to admit of new additions from the ground up quite cheaply.

By the Court. In order to install and use to advantage the two more wheels which would be the next step, what would you have to do to the headrace?

A. Nothing to the headrace, as it was and as it will be restored before the Government began back filling in there; before their operations under this law nothing was required by the headrace at all; now something might be required in low water; at high water—high stages of lake—we could get along.

There is now in existence, complete and ready for use, the penstock, so called, and the draft tube—the concrete draft tube—down to the water and underneath the water level out into the outer deep part of the tailrace, for nine complete wheels and three exciter wheels—that is, nine of the large wheels, carrying alternators, and three of the little wheels, which carry the exciters; out of the nine large wheels only four have been placed; out of the three exciter wheels only two have been placed. Two of the large wheels would come under the existing roof and craneway, and their setting would involve no additional expense for house of craneway, or crane, or any part of the sheltering apparatus, so to speak, and the other three wheels—that is, there are four now—two can be added in the same house, three more to make nine of the large wheels, and one exciter wheel would have to go in the south unit—the south three-wheel unit over which the house has not been extended. The extension of the house and the craneway carrying the traveling crane is very small. There is a temporary wooden end in the house, and the substructure up to the floor level is complete. $2,000 to $2,500 would be the expense of installing the two wheels, in round numbers. It involves only the handling and the temporary arrangement for keeping out the water until we could set the wheels we had planned and arranged for; that estimate allows for the possibility for having to fuss with the first wheel before we get the arrangement into working order, but does not include the cost of the wheel nor the generator. Additional cost per annum for oil, about $5.00.

The engineers for the respective parties other than Michigan-Lake Superior Power Company and St. Mary's Power Company, who took no part in such conference, having been in conference for the purpose of arriving at an agreement with reference to certain mat-
392 ters involved in this controversy, here made their report, and it was understood between the parties that such report should be take as evidence in the case the same as if an expert witness was called to the stand and testified to the things specified in this report according to his judgment of the facts, which report is as follows:

To the attorneys of the complainants and respondents, in re condemnation proceedings for St. Marys Falls Canal.

SIRS: Your committee of experts respectfully report the following agreement as to physical conditions:

1. The thread of the stream, as the thalweg, or line of the deepest channel, has been located from the international bridge eastward, from the soundings of the survey February, 1911, by Sherman Moore; from the bridge westward from the Macomb map of 1885 and from soundings of 1893 by the U. S. Engineer Office at Sault

Ste. Marie. This thread of the stream has been delineated on the large map exhibited in the court room.

2. By extending a line normal to the thread of the stream from a point at the intersection of the meander line with the north boundary of the U. S. canal lands, at the east extremity of the Chandler-Dunbar uplands, the easterly boundary of the submerged lands of the said company was located.

3. (1) By a similar method the lines defining the east and west boundaries of submerged lands appurtenant to the Portage Street frontage were located.

(2) By the method of division on the chord across the mouth of the bay in proportion to the meander frontages and the extension from the chord frontage of Portage Street of lines normal to the thread of the stream, an alternative location of the submerged lands appurtenant to Portage Street has been indicated.

4. By a construction similar to that employed in defining the east boundary of the Chandler-Dunbar submerged lands, the west boundary of claims 95 and 96 was located.

5. The fall of the St. Marys River within the limits of the Portage Street riparian boundaries amounts to one-thousandth of a
393 foot for the first method of projection and to three one-thousandths of a foot for the second method, as described in paragraph three.

6. The committee agrees to accept as the best available data, from the Report of the International Waterways Commission on the Regulation of Lake Erie, 1910—

(*a*) Table 19, page 101, as the volume of flow of the St. Marys River prior to 1908.

(*b*) Table 3, page 86, as the elevation of the water surface of St. Marys River at the Southwest Pier above the locks prior to 1908.

(*c*) Table 2, page 85, as the elevation of the water surface of Lake Superior prior to 1908.

(*d*) Statement on page 81 that the rise of Lake Superior due to artificial changes in the St. Mary's River in the vicinity of the rapids is 0.87 feet.

7. From tables of the U. S. Engineer's Office as the best available data:

(*a*) The elevation of the water surface of St. Marys River at Southwest Pier above the locks, with 0.20 foot added, for the period after January first, 1908.

(*b*) The elevation of the water surface of St. Marys River at Northeast Pier below the locks with 0.20 foot added.

(*c*) The total fall from Southwest Pier gauge above the locks to Northeast Pier gauge below the locks.

(*d*) The hourly elevations at both Southwest Pier and Northeast Pier, 0.20 foot to be added to each.

8. Table of discharges based on observations of the U. S. Lake Survey in 1909, for the flow in St. Marys River since January 1st, 1908, appended.

9. General conditions in 1908: For Southwest Pier, 600.00, 601.00, 602.00, 603.00; inlet C.-D. Co. Canal, 599.85, 600.85, 601.85, 602.85; international bridge, 598.74, 599.50, 600.25, 601.02.

Change in stage at international bridge is 0.76 ft. for 1.00 ft. at the Southwest Pier.

394 10. For conditions of January–February, 1911; for Southwest Pier, 600.10; international bridge, 598.82; east line C.-D. Co. property, 590.20; discharge through rapids, 28,300 cubic feet per second.

11. Change in elevation on the east line under conditions of January–February, 1911, is 0.63 ft. for a change of 1.00 ft. at Southwest Pier.

12. That conditions at the Chandler-Dunbar east line are:

Total discharge of rapids.

For SW. Pier gage.	Discharge, cu. ft. per sec.	Area, sq. ft.	Velocity, ft. per sec.	Velocity head, feet.
600	26,740	4,900	5.46	0.47
601	42,040	6,160	6.82	0.73
602	57,340	7,420	7.73	0.93
603	72,640	8,680	8.37	1.10
604	87,940	9,940	8.85	1.21

13. That in addition to the flow through the rapids as given under paragraph twelve, there is a quantity of water flowing through other outlets, estimated to be 20,060 cu. ft. per second, distributed as follows:

Through the Michigan-Lake Superior Power Canal	12,300 cu. ft. sec.
Through the Edison Sault Power Canal	980 cu. ft. sec.
Through the Canadian Power Canal	6,130 cu. ft. sec.
Through the American Ship Canal	450 cu. ft. sec.
Through the Canadian Ship Canal	200 cu. ft. sec.
Total	20,060 cu. ft. sec.

These quantities were deduced from data obtained in 1909 by the U. S. Lake Survey.

Also that the total discharge of the St. Marys Rapids in cubic feet per second from January 1, 1908, to date is represented by the equation:

$$Q = 15{,}300\ (\text{elevation at SW. Pier gage} - 600) \times 26{,}740$$

395 and to the discharge of the rapids as computed by this equation should be added 20,060 cu. ft. per second for diversions through other outlets.

14. The proportion of water flowing continuously over the submerged lands to the south of a line delineated and designated as the international boundary line on the large Chandler-Dunbar map, is taken for the purposes of this case as 65 per cent for all river stages. This is based on river conditions existing prior to the building of the international bridge.

15. The elevations of water surface in the rapids as determined by the survey of January–February, 1911, are substantially the same

for the same stage of water at SW. Pier gage as existed before the building of the tail-race embankment of the Edison Sault Company.

16. The four maps of the survey of the rapids of January–February, 1911, are accepted as substantially correct.

17. That conditions at the international bridge as to the areas of spans, are correctly shown by the table on page 2836 of the report of the Chief of Engineers for 1903, and that the areas of spans 1 and 2 below a line at elevation 600.1 at the bridge, are 589 and 720 sq. ft. respectively. These tables and the above elevation are based on the 1877 levels, which are 0.20 ft. lower than the 1903 levels used elsewhere in this report.

18. That at the west boundary of the Chandler-Dunbar property the mean velocity is substantially 1.6 ft. per second, the velocity head is 9.94 ft., and the elevation of water surface corresponds substantially to that simultaneously existing at the SW. Pier.

19. The quantity of water amounting to 4,000 cu. ft. per second recommended for lock and log purposes by the International Waterways Commission is apportioned as follows:

1,500 cu. ft. per second for five locks for eight months, equivalent to 1,000 cu. ft. per second for the year, and 3,000 cu. ft. per second for a log chute and additional locks.

396 All of which is respectfully submitted.

(Signed) JOHN BOGART,
Chairman of Conference of Engineers.
GLW. FCS.

March 2, 1911.

United States Lake Survey, table of discharges St. Marys River from January 1st, 1908, to December, 1910, inclusive:

These discharges are based on the equation

$$Q=15{,}300\ (\text{SW. Pier, } 600.00)\ 26{,}740\ 20{,}060.$$

Elevation of SW. Pier gage.

[Discharge in cu. ft. per sec.]

Year	1908	1909	1910
January	601.04	600.56	600.87
	62,100	54,700	59,400
February	600.75	600.63	600.79
	57,600	55,800	58,200
March	600.81	600.70	600.44
	58,500	56,800	59,200
April	600.18	600.10	600.72
	49,200	48,000	57,500
May	601.10	600.84	600.90
	63,600	59,600	60,500
June	601.76	601.09	601.20
	73,700	63,400	65,100
July	602.07	600.95	601.32
	78,400	61,300	66,900
August	602.00	601.65	600.94
	77,300	72,000	61,100
September	601.67	601.16	601.19
	72,300	64,500	64,600
October	600.88	600.94	600.83
	60,200	61,100	59,400
November	601.11	601.06	600.32
	63,700	63,000	51,600
December	601.61	601.09	600.18
	55,800	63,100	49,200

NOTE.—In computing these discharges the quantity of water used by locks in January, February, and March is diminished by 600 cubic feet per second, and in December and April by 300.

(GLW. FCS.)

Thereupon the respondent, Chandler-Dunbar Water Power Company, rested its case.

And thereupon, to maintain the issue on its part, the Michigan-Lake Superior Power Company and Charles M. Brown and Charles D. Warren, as receivers of the Michigan-Lake Superior Power Company and the St. Marys Power Company, produced as a wit-
397 ness LEONARD H. DAVIS, who, subject to the objection, ruling, and exception heretofore noted, testified:

(Before the testimony of this witness commenced the following occurred:

Mr. ELDREDGE. If the court please, my attention has been called to certain evidence introduced on behalf of the Chandler-Dunbar Water Power Company and the Edison Sault Electric Company as possibly having some tendency to prejudice the Michigan-Lake Superior Power Company in the case, and it was not the intention. Therefore, we have agreed to declare on record that we do not claim that the evidence in this case establishes that the canal of the Michigan-Lake Superior Power Company has lowered the levels of Lake Superior, regard being had to the remedial works constructed by that company.

The COURT. That may be placed on the record, and it is my understanding, so far as there is any controversy between the Chandler-Dunbar Water Power Company and the Michigan-Lake Superior Power Company with reference to any rights reached by this proceeding, that controversy will be postponed for separate and later consideration.)

I am the engineer of the Michigan-Lake Superior Power Company and also engineer for the Canadian interest at the Sault, and have been for some time. Am familiar with physical conditions and water conditions there. The capacity of the Michigan-Lake Superior Power Company Canal is 32,000 cubic second feet. It is designed to operate under a head of 16 feet, and it is expected that there will be about 40,000 horsepower available. Island No. 5 has a fall appurtenant to it of approximately two and a half feet on the shore line and varying somewhat from that amount as the water surface progresses northerly towards the international boundary. The average fall is probably about two feet. That makes a substantial proportion of the total fall of the rapids. The whole fall of the rapids is about nineteen and a half feet. While Island No. 5 is very small in itself, it is about nine to ten per cent of the whole, and any project that was built there would have to use that fall in order to operate at its best capacity. Consequently, Island No. 5 has a substantial value contributing to the economical development of a power plant in the rapids. The effective fall without Island

No. 5 would be 15 or 16 feet. With Island No. 5, 18 or 19 feet. I should say the value of Island No. 5, considering it as a proportion of the whole fall, would be about $50,000. I have had charge of the power canal of the Michigan-Lake Superior Power Company since 1903, and of the Canadian power canal since 1901, and have also made a number of examinations of water powers in Ontario, Quebec, and New England. The flow given in the report of the conference of engineers as applicable to the Michigan-Lake Superior Power Company was 12,300 cubic feet per second. That flow is substantially correct for the time at which the measurements were taken, namely, in August, I think, 1909. It represents, however, the maximum flow that was ever passed through the power canal of that company; and the average flow through the canal since the first of January, 1908, is as follows: For the year 1908, 10,450
398 cubic feet per second; for 1909, 7,210 cubic feet per second; for 1910, 8,020 cubic feet per second; an average for the three years of 8,560 cubic feet per second. The actual capacity of the canal is 32,000 cubic feet per second.

Cross-examination by PETITIONER:

The average flow has been cut down partly by reason of the fact that the Government has stopped the flow for several months. In recent years that has occurred frequently. The flow in the Michigan-Lake Superior Power Company Canal has been stopped for more than a month at a time. The longest period was about three months. That was a complete shutdown in 1909. I give the value of Island No. 5 at $50,000 considering it as a part contributing to this head, taking the whole head and apportioning our share of it. My figures of value for the whole head would be $500,000, or substantially at the rate of $25,000 per foot head. The fall of two feet is not available for power development, if not joined with another fall it would not be. The Michigan-Lake Superior Power Company sells power. We have only two contracts. One is for power delivered on the turbine shaft; that is $10 per horsepower per year. The other is power delivered at the switchboard, at $20 per horsepower per year. The contract for power delivered at the turbine shaft is for 20,000 horsepower, of which about 10,000 is now being used. The other is for 350 horsepower. Both contracts are for 24-hour horsepower.

Cross-examination by RESPONDENT, CHANDLER-DUNBAR WATER POWER COMPANY:

I think $18 to $20 per horsepower is about all that we could get. The power we sold at $10 a horsepower on the turbine shaft resulted in a loss sufficient to mean the reorganization of the company. It probably should have been not less than $12 to $14 per horsepower. The capital cost of bringing the power from the power on the shaft to the switchboard is $25 per horsepower.

On cross-examination by counsel for this respondent, he said:

Where, on a continuous fall like this you will build your dam depends in large part upon the particular lay of the land. If you

build it at the foot of the fall you will have very little tail race excavation and large construction and under some conditions more excavation to bring your water in. It is purely and simply a question of economy as to where you build the power house, whether you saved more by lessening your tail race excavation or by lessening your dam or power-house construction, just as you might call it. As you move up you increase the expense of the work below and you lessen the expense above. It is a matter of finding the economical point.

Recross-examination by PETITIONER:

The Michigan-Lake Superior Power Company has a bonded indebtedness of $5,900,000. The $18 to $20 per horsepower is a fair value at the Sault.

Thereupon all the respondents rested their case.

399 Upon the conclusion of the testimony for the defendants the counsel for the United States requested that their right to make a motion to strike out of the case all of the testimony of the respective defendants introduced by them or either of them as to water-power values and lock and canal values, and as to the necessities for the Government to take all of the property for navigation purposes, be reserved until the close of all the proofs.

Which request was granted.

The counsel for the United States then announced that they desired to offer testimony in rebuttal of the defendants' testimony as to the value of water power physically appurtenant to premises, with other rebuttal testimony concerning the value of the uplands, and as to the necessities existing for the taking, as alleged in the petition; and to do so without waiving their right to object to all of the testimony in the case respecting the value of water power as appurtenant to said uplands, and to Island No. 5, as offered aforesaid by defendants, and also as to the necessity for the taking and with the right reserved at the conclusion of all the proofs to move to strike out of the case all the testimony respecting the values of water power as incompetent to be proven as elements of value for which they should be awarded compensation by the United States in this proceeding, and all the testimony as to necessity save the declaration of Congress; and the court permitted this course to be taken; such rights reserved to the United States without being considered as having waived any rights in this regard by so doing.

Thereupon the United States, saving such rights reserved, offered the following rebuttal testimony on the values of water power as given by the Chandler-Dunbar Water Power Company, the Michigan-Lake Superior Power Company, its receivers aforesaid, and the St. Mary's Power Company, and as to the necessities for navigation uses of all the property sought to be condemned.

Thereupon the petitioner called as a witness HOBART PORTER, who, being duly sworn, testified as follows:

400 I am an engineer, having offices in both New York and San Francisco. Have been engaged in that profession in its various branches since 1886. Have been associated with water-power

developments and the transmission of electricity since in the early 90's, when electricity was transmitted commercially some ten or fifteen miles in southern California from water power. Since 1895 I have been a member of the firm of Sanderson & Porter, consulting engineers. I have had to do with a great many of the larger hydro-electric developments of the country, and with the purchase and sale of water-power sites intended for development of water power, and which water powers have a total capacity of a good many hundred thousand horsepower. I have had to do with designing, financing, and constructing plants now in operation, producing, I should think, a hundred thousand horsepower, and have examined and passed upon water powers for banking institutions in many parts of the United States. I have had to do with the transmission of power over long distances, and, with my partners, designed the first 100,000-volt transmission line which was put into practical operation.

I have visited Sault Ste. Marie and inspected the lands and water here in controversy. The water power at Sault Ste. Marie has a low head; I take 8¾ or nine feet as the available head. I should base the power, not on the average, but on the mean year as described in the engineers' report. As I understand the engineers' report, that is 65,000 second-feet, and 65% of this flow is on the American side of the international boundary. This would leave 38,000 second-feet, and I would not care to figure over 75% efficiency. If the power were sold on the switchboard, this would give about 28,000 horsepower. If taken elsewhere, losses would result in the delivery. I have made observations in one plant which produces from 25,000 to 30,000 horsepower, which is sold within a radius, most of it, of 10 or 15 miles, to determine the efficiency and loss in transmission. Based upon this experience, I should say that the power available at Sault Ste. Marie was between 20,000 and 28,000 horsepower.

I have had quite a general experience in the marketing of power where a market must be created, as well as in marketing it
401 where the market exists, and it has been uniformly difficult to secure a market where the manufacturers already have steam plants unless a very substantial reduction is made in the cost. It is comparatively easy where they have not a steam plant or are just going into business. I think the almost universal experience of water-power builders has been that the securing of contracts is much more difficult than anticipated. I think that two or three years to build up a market is a modest estimate. At Sault Ste. Marie the present power company in a general way is supplying the market without competition. It is probably doing all the lighting business for which there is any demand, and such local power business as exists. The creation of a further market would be the result of energy and ability in getting manufacturers to come there to use the power, and in so doing Sault Ste. Marie would have to compete with all the potential and partly developed powers which have power for sale in large quantities in the United States. The usual method of

raising money for new projects of this kind is to see the person who has it. Where the project is small, it is often possible to raise the money locally. In order to develop a large water power, which requires several millions of dollars, and which will take several years to develop—and I estimate it would take at least 18 months, and it might be three times as long, to develop this power—the usual course where millions are required is to go to people who make a practice of putting up money for that kind of development. There is a very limited number of persons and institutions in the United States who are prepared to advance money for water-power development in large blocks. Some of the same people will be found to be interested in most of the large hydraulic developments except the Southern Power Company. So that any power company that is trying to raise money comes in competition with the other companies, and the usual method employed to raise several millions for water-power development is to arrange to sell bonds to be delivered when the plant is completed. These bonds are sold at a discount, and commissioners have to be paid to the bankers who secure the subscriptions. Bonds as a rule are delivered at the completion of construction. That
402 requires that money shall be put up for the construction between the time it commences and the time the bonds are ready for delivery. It is usual under these circumstances to secure a loan on the securities, because the ultimate purchasers who take the bonds when the work is done are responsible. The interest rate on such loans for two or three years or 18 months is at least 6%, with 2% or 3% commission. The result of all these items, together with the item for organization expenses, legal fees, fees to the trust companies for registering the bonds, legal fees for drawing mortgages, and all other incidental expenses, is that the average large water power in the United States has about $2,000 worth of bonds on it for every $1,000 money actually spent on the water power. The sum of all the various incidental expenses is a little hard to figure up, how it all goes; but the unpleasant fact seems to remain that any hydroelectric development costing several million dollars seems to have to carry nearly twice or even more than twice as many bonds as the actual cost of the physical work. In order to sell these bonds, it is necessary that interest should be earned from one and a half to two and one-half times. It takes 10% interest in bonds to actually float your physical work, and that interest must be earned once and a half or twice over, in order that the banker will buy the bonds. As a practical matter, it generally turns out that financiers will not put up money unless there is every probability that the earnings will be two or three times the interest on the bonds, and unless such earnings are reasonably assured from industries already created or contracts with responsible industries. I think in the present state of the water-power situation in the United States, the value of the Chandler-Dunbar Water Power Company's power is largely speculative, for the reason that, personally, I have not only inspected the St. Mary River in a general way and have made general figures as to

what in my opinion it would cost to put a hydroelectric plant there, or to build an industrial plant there for the use of the power, and my rough estimate, which I consider as tentative, would make me feel that the probable cost of such development would be three or four million dollars at least. Such a plant I would figure would
403 cost at least $50,000 to operate. $75,000 to $100,000 should be set aside annually to cover depreciation and obsolescence, etc. Such a plant would pay at least $50,000 annually in taxes. Assuming that electricity could be sold in bulk at Sault Ste. Marie at $20 per horsepower, as there is power at present for sale in various parts of the country at less than this rate, and assuming there is 20,000 horsepower, or perhaps 25,000 horsepower, which could be sold at $20, the sum of the other items, together with a reasonable amount for contingencies, would eat up all the earnings that would come from the sale of power; and in considering such a development I would not consider it as a commercial proposition that would appeal to financiers or bankers unless it would earn at least twice as much as the interest on its bonds, after setting aside the operating expenses, depreciations, taxes, and all other charges that might be made against it. Of course it goes without saying that no project of such magnitude could be financed unless all the titles, rights, and every possible question that the lawyers who guard the strong boxes of the financiers could think of were answered in the most satisfactory way. I think the value is purely speculative. Considering the contingency of Governmental control over the St. Marys River and the rapids for the purposes of navigation, I feel, as a result of my experience, that any contingency regarding the safety of an investment of this kind raises a question at once, and makes it exceedingly difficult, if not impossible, to secure the money to finance it. In this connection, I can say that I have been largely interested in water powers in California which have been, some of them, developed under permits from the Government, and I am interested in some that we would like to be able to develop which promise very large returns, but because we can only get a revocable permit we can't get the slightest bit of financial assistance in constructing them. I have assumed in what I have said with reference to the development at Sault Ste. Marie that it would be found feasible to design a type of power house that would satisfy the War Department and that would be safe to place in the rapids because it would not obstruct the flow of the
404 water. Personally, when I tried to see how that could be done, without giving a great deal of attention to it, it seemed to me like quite a hard proposition. If you built a power house all the way from the shore to the international boundary line, the War Department might object and say this may get us into trouble with ice, and it might cause a great deal of damage. I assume, however, that the engineers who have been at work on this problem will have found a satisfactory solution of that question. The development of a smaller amount of power close to the shore would probably be cheaper in a good many specific items, such as excavation, the ease

of getting to the work, the fact that the water is not as deep, and if it could be financed with local capital, could probably be financed a good deal more cheaply than if it were seeking for its capital in the market of the United States, where it would be brought into direct competition with every other enterprise seeking money. The money market is like any other competitive business. The enterprise that will pay the highest rate to the bankers secures the money; and as long as there are more enterprises, even the more meritorious stand aside for those that are willing to pay the higher rates, which simply means that the owners of the property take a great deal less for their property in order to get it developed. I think the marketing of power might or might not be easier in small blocks, depending upon whether a single manufacturing institution, like the carbide works or the electro-chemical industries, could be found who would be glad to take all the power from the entire works. Probably the larger works, as a whole, could be developed a little more cheaply as to overhead charges and superintendence, just as a very large piece of work can be more easily done than a small one. As I remember, the Edison Company at the Sault have a capacity of nine wheels in their substructure, of 450 kilowatts each, and that the power house, by simply putting a roof over it and finishing up and putting in wheels and turbines, would have a capacity, I think, speaking from recollection, of about 6,000 horsepower. I should think from a mere inspection that it would be necessary to widen or deepen the head race, in order to deliver sufficient water for that purpose. That would not be a matter of great expense. The six thousand horsepower would be at the switchboard. I am not sure whether, under the present head and tail race conditions, the wheels could drive the electric units up to that capacity—if sufficient water could be gotten to them and away from them in the head and tail race to make the wheels drive the generators. The generators there are of an excellent type. The figures I have given are on the present head. The existing wheels are arranged for the present head. I understand that they are specially built wheels, which differ from the ordinary commercial wheel, and it is possible to utilize them either on a lower or higher head. There are four wheels, four units, there now. I am speaking about a 14-foot head there, that being substantially the head as it exists now. To operate under the low head, either the wheels would have to be changed or the generators. I would estimate the cost of changing the generators at $15,000. The plant would then have a capacity under such head of delivering about 1,000 horsepower with the four units. Five more units could be installed at a price I estimate at $50,000, making a total of $65,000 for such installation, and that would make a plant capable of delivering somewhere between 2,000 and 2,200 or 2,300 horsepower. In addition to that, some money would have to be expended upon the foundation. The present power house with the present head with nine units would have a capacity of about 500 horsepower each.

I took the figure of 65,000 second-feet as the flow. On reading the report of the engineers more carefully since I gave those figures I found that the months of December, 1910, and January and February, 1911, the flow was slightly less than 50,000 second-feet. On this flow the horsepower available would be from 15,000 to 20,000, depending on whether it was delivered at a distant point or on the switchboard. If half the power was available instead of 65% to the American side, it would be from 12,000 to 16,000 horsepower. Under the conditions existing, it would not be commercially feasible to make a development in excess of 20,000 horsepower. If the improvements were built by piecemeal, I think 20% should be added—from 15 to 25%.

406 I have taken the United States Census Report, as well as an atlas, and looked at all the towns and communities that are within transmission distance of Sault Ste. Marie, and I have limited those to the upper peninsula, because it has not yet been found possible, commercially, to transmit power in large quantities under water for any very considerable distance, like the Straits of Mackinac. Power has been transmitted overhead for as much as a mile in California by a long span, but I understand the straits at Mackinac, after studying the map, are considerably more than that, and I would not consider that feasible. The communities within 100 or 150 miles in the upper peninsula are all small, and their local consumption of power is not sufficient to justify building long-distance transmission lines, which, when they are built for as much as 100 or 150 miles, will cost as much as from $5,000 to $7,000 a mile, irrespective of whether less than 10,000 horsepower is to be transmitted or not. The mere cost of the steel towers and the construction is so great that the transmission of a small amount of power carries to expensive interest, and therefore I should consider that the transmission of power from the Sault in any direction was not commercially feasible, because nothing exists now that would demand that power, and a company that was going to buy power in bulk would prefer to come directly to the Sault so as to save interest charges and very large transmission lines. In a general way I have considered the iron mines in the upper peninsula, because I am familiar with them. The Great Northern Power Company at Duluth has considered, in connection with the transmission of power to the iron mines at Duluth, and the cost will run at least from $5,000 to $7,000 a mile, and the limit of distance will probably be 15 miles. The iron mines, I understand, only operate during a portion of the year, and the interest charges are for the whole year, so it becomes quite an expensive proposition.

JOHN BOGART, a witness for the United States, being recalled, testified as follows:

My home is in New York City, and I have been a civil engineer for more than 30 years. I have had a general experience in engi-

neering, connected with railways, municipal works, and of late years, since the beginning of the Niagara Falls power development,
407 have been very largely in the development of power. I was one of the board of engineers in charge of the designing and construction of the Niagara Falls Power Company's plant, and continued as the consulting engineer of the Niagara Falls Power Company during its development of power. I have also been a consulting engineer for the State of New York and a number of power companies. I have been called upon frequently by financial men to determine whether they were safe in investing money in power propositions. I have been at Sault Ste. Marie and am familiar with the head and volume of flow of St. Marys River. I am familiar with financial conditions at present existing, generally speaking. I think that, considering the fact that the Federal Government has the right to prevent the erection of any dam in the St. Marys River; considering the fact that the Michigan-Lake Superior Power Company has litigation pending against the Chandler-Dunbar Company involving rights in the flow of the river past their land; considering the fact that any improvements in the river may be removed by the Government at any time it sees fit; considering, also, that the fall is from nine to nine and a half feet: I do not think the water power for such Chandler-Dunbar property, under those conditions, has any commercial value. It would be substantially impossible, under that state of facts, to finance such a proposition. The erection and construction of the dam and requisite power houses, the installation of machinery and all the appurtenances for the production of power involve necessarily the use of a large sum of money, estimated by one of my predecessors in the witness chair at $2,996,064—Mr. Wallace's estimate. To secure that money in the way that money has been secured in my experience for industrial enterprises for the development of powers would require an issue of bonds and an underwriting of such bonds at some discount; possibly, if all the conditions were favorable, at a price of 80, together with the payment to the underwriters or brokers of a commission, which is generally about 5%. Money should be provided for interest during the construction period, which I should suppose would be at least 18 months or two years, and money would have to be
408 provided for paying the interest on bonds until the amount of output and price received from the output was sufficient to at least pay the interest, fixed charges, and operating expenses. Other payments which are required in addition to the actual cash cost of construction are quite numerous; as, for instance, legal fees, engraving of bonds, which is not at all a small item; trustee company's fees for trusteeship, for certifying bonds; the attorneys for drawing the mortgage, attorneys of the trust company for approving the mortgage; the management during the period for securing a sufficient sale of power to pay fixed charges and operation; office expenses in a general way, and some provision for working capital, so that the total amount of bond issue is necessarily larger than the

simple cost in cash of the actual construction. I think that it is a fact that there is nothing more timid than money; and an investment of a large amount of money, in millions, is very difficult if not impossible to secure if there are any speculative and dangerous conditions surrounding the proposed investment. Several of the conditions I have stated make this project what I call and what I think the financiers with whom I have been associated would call very speculative, and I very much doubt whether the money could be secured under these conditions. The fact is, also, that there must be, in order to secure money, a fair assurance of sufficient net returns not only to pay the interest on bonds and the elements of other cost that I have recited but to pay a reasonable interest on the stock of the company. The development cost, the promoter's interest, I sometimes think it is not fair to always call that watered stock, because I think that sometimes the men who have worked very hard to secure development of power have to take what they get in stock, and it is a return for a great deal of hard work. Sometimes stock is too much watered, without doubt.

With reference to my judgment as to the commercial value in June, 1909, of this power, assuming that the right was unquestioned and perfect to utilize all of the available power after making allowance for the 4,000 cubic second-feet for navigation; the ele-
409 ments to determine such a value would be, first, the volume of water upon which fairly could be placed an estimate of the power that could be sold. I find in the report of the International Waterways Commission a record of the volume of flow out from Lake Superior for a large number of years, since 1860 up to 1907, and I have been furnished also with the continuation of those flows up to and including 1910. I find that the flow varies very considerably from month to month, and in different years, that it has been as low as a monthly mean as 48,200 second-feet, that it has been as low for the mean of a whole year as 58,900 second-feet. I find that for three consecutive years the mean for those three years of 61,200 second-feet; and I think that that amount as continuing through three years is probably as high a volume as would be considered in the purchase of water for power. This flow, to change it into power with a head, must be considered as continuous for 24 hours for every day of the year, including Sundays. There have been years in which the volume of flow has been considerably greater. The extreme maximum in this record is 101,100 second-feet. Taking this flow, this mean flow, for three consecutive years at 61,200, and deducting from it 4,000 second-feet, leaves 57,200, half of which is 28,600 second-feet, which I understand would be available to the company on the south side of the international boundary.

The next element would be the head at which it could be delivered and used on turbine wheels. A calculation has been made of that, which was given by Mr. Sabin, as being 8.8 feet, that being the net head, with all losses for friction, etc., 8.8 feet. If this head is taken with that volume, it gives a continuous mean power for these three years of 28,600 theoretical horsepower.

The constructions which would be required to make it possible to deliver this water under that head to a consumer would, I suppose, be a dam across the rapids from the south side to the neighborhood of the international boundary, and a dike or dam running from the end of this first dam westerly to the head of the property. This dam, the north and south dam, would have to be provided
410 with means for delivering the water under this head to a power plant or a consumer, and therefore I judge it should be placed sufficiently above the east boundary of the Chandler-Dunbar property to permit a power house to be put between this dam and the east line, as has been indicated, substantially upon the plans presented by Mr. Orbison. I have made an estimate of the cost for the necessary constructions, which would amount to $522,500. I have considered that to be represented, for the sake of determining an interest charge by 5% bonds, at 80%, making a bond issue, to look at it that way, of $650,000. Now, provided a customer could be secured for the whole volume of water, which represents 28,000 horsepower, I have taken a price for that water of $5 per horsepower, without any turbines or machinery or any apparatus to develop the power. This is merely for the water. That amounts to $140,000. I have then deducted from that the interest on the bonds at 5%, $32,500. By $5 as the price per horsepower I mean annual rental. I have also deducted interest, $32,500; maintenance of the sluices and regulating apparatus, $10,000 per annum; depreciation, I have taken it only 1%, $5,500; operation, measuring water, office expenses, etc., $15,000; making $63,000, leaving a net income of $77,000, which capitalized at 10% is $770,000. That is, of course, in case the whole water were sold at that price. If the whole of the water was not sold at that price, the return would be proportionately less. If, for instance, in one year only 20,000 horsepower of water were sold, instead of 28,000, it would give a net return of only $37,000, and capitalized would be only $370,000. I think that is lower than I would give my opinion as the value. The other I think is possibly a little high. But I think that the two are fair statements as to what might be called a good valuation, and a moderate valuation.

I think that under the circumstances there existing, $5 per theoretical horsepower and 10% on capitalization are about the right figures to use. Of course that is all a matter of judgment and some uncertainty. Those figures in my estimate are upon the theory that the title is absolutely complete and perfect and there is no ques-
411 tion of Government control of the waters. The fact that there is Government control, so that the Government can shut off the use of the water, interferes with the sale of a water-power proposition in the market. My figures are simply for water delivered to the flume of the mill, and the mill afterwards puts in the turbines and all the apparatus for utilizing this power. This is merely to the owner of the water right, and not to the mill, and it is upon the basis of theoretical horsepower.

I have gone over the figures made by Mr. Sabin and I find that the value of the 8,000 horsepower differs so little proportionately from the value that I gave yesterday for the 28,000 horsepower that I fix my opinion of the value at $220,000 for the 8,000 horsepower. This is the value of water delivered with the head, not including the turbine or the electrical equipment or the losses in the turbine or the electrical equipment. This is controlled water, which is also the basis upon which I valued the total amount yesterday. In valuing the amount for which the present head works are constructed, and for which, I think, there is quite a certain sale, I have put that much higher; but in this particular place the amount of work to be done in order to deliver the water at this head does not vary very much, whether the whole power of water is to be delivered or whether a part of it is to be delivered, as long as to deliver that part one has to go out into the channel and build special works to secure the head. An increased proportionate cost of delivering a small amount would in a measure be compensated for by the better market of the smaller amount. With the reduced head—that is, from their present installation, say—900 horsepower could be delivered. I think that was Prof. Williams' figures for four wheels; I think that was it, and that my value of it is $101,000. This is for the controlled water at the flume, and my figures are larger as to its value for the small amount. I assumed a value to that delivered water of $11.30 per theoretical horsepower of water so controlled. I was furnished from the lease of the Edison Sault Company from the Chandler-Dunbar
412 Company the following prices: 150 horsepower without charge, 250 at $16⅔ per horsepower per annum, and 500 at $12, 500 being the balance making up the 900. Averaging those, the price was $11.30, and I capitalized the income at 10%.

I am familiar with the price of electricity throughout the country. The price of power at Niagara Falls—there are a number of contracts for the sale of power to users in Niagara Falls, varying somewhat with the amount of power taken by the consumer and somewhat with the character of its use and with what we call the load factor—it runs for some large users of power to about $15 per horsepower per annum, and goes up to $25 per horsepower per annum in Niagara Falls. I acquired that knowledge of price in the course of my business as consulting engineer for the Niagara Falls Power Company. I know the prices in various parts of the country. In the Southern States power for cotton mills with moderate transmission is sold as low as $12 per horsepower per annum for the cotton-mill load, which is generally taken at 60 hours per week, 11 hours for five days in the week and five hours for Saturday and none for Sunday. For other uses in that same southern country the price runs up to about $25 also. In Niagara the load factor for the low-priced power is very high, some of that substantially or actually 24-hour power the year round for electrolytic work, which continually uses power without interruption. What I have been speaking of are prices received by the power companies which sell to customers at what might be called

wholesale amounts. The prices at Niagara Falls are supposed to be very cheap. There is a large amount of power.

SETH MOULTON, a witness for the Government, being sworn, testified as follows:

Direct examination:

I am a civil and industrial engineer. I have made a special study of value of water power for hydroelectric development for paper and pulp mills and other industries during the past twelve years.
413 After leaving college I entered the employ*ed* of the Holyoke Machine Company, manufacturers of turbine water wheels and electric-power transmission equipment. I prepared plans for water wheels for mills and hydroelectric developments in Maine, New Hampshire, Vermont, New York, and the South during that period. I was in the employ of I. W. Jones, consulting and designing engineer, and was his principal assistant for nine years, having charge of both design and field work.

I am thoroughly acquainted with the paper-mill business and pulp mills, the building of them. The price for controlled water delivered to the head of the works of a consumer in the paper mill will vary from $3 to $12 a horsepower, depending on the location of the power. This means ready for a mill to be built. I consider a fair value for power for use in the manufacture of pulp and paper to be from $15 to $18 a horsepower at the coupling; for newspaper manufacture, about $20 a horsepower at the mill. I consider a fair rental value for controlled water at the Sault to be $5 per horsepower. The Province of Ontario has a contract with the Ontario Power Company for the delivery of electrical horsepower on the switchboard at the generating station*g* of from $9.40 to $9.50 per annum. This is at Niagara Falls. Also, at Buffalo, I am familiar with the contract that was recently drawn up for electric power delivered to a paper mill at the walls of the mill at a potential of 2,200 volts of $21 a horsepower. That is Niagara power delivered at Buffalo. With electric power costing $9.50 per year at the station switchboard you could grind wood pulp economically by using motors for driving the grinder.

We reported on an undeveloped power in the northern part of Maine favorably situated for a pulp or paper mill, near a plentiful*ly* supply of wood from both Canada and Maine, giving 24 hours power on a possible head of 75 feet, with large tributary storage lakes, to be developed for about 11,200 horsepower, theoretical. The owners held a charter from the State of Maine which secured their rights. We advised our clients at the time they secured the charter that the power, land, and rights were worth in our opinion in round
414 numbers $200,000, or about $18 a horsepower; and I would say that that land is still held at that value, and has not been disposed of. It was about three years ago that we reported on the property. Last summer, upon recommendation, a plant purchased a chartered power company owning large tracts of land and a pos-

sible development for 9,000 theoretical horsepower on a 40-foot head about eight miles from a large manufacturing center. The price paid was $28 per theoretical horsepower. The charter I refer to is a grant from the State legislature permitting the construction of power lines and generating electric power for manufacturing or general distribution purposes. These values per theoretical horsepower that I have given are the selling value, not the rental value; they are the total value.

I have studied the conditions at St. Marys River and the site for development under consideration. I thing it is a desirable and practicable location for a pulp or paper mill plant, from the construction standpoint. I have studied the plans prepared by Mr. Wallace. The general idea of them is the logical solution of the problem. His estimated cost of each unit in general terms is correct. I found that there was one or two items omitted, such as engineering, contingencies, cost of wood, preparing machinery, and a few other minor details. I have prepared an estimate, such as we would file if a client came to us and asked us what our opinion was as to the value of this power. I find the figures in two ways, assume two cases; that is, for the value of the water alone, and if used in a ground wood mill, such as projected in Mr. Wallace's plans; and the value of the water rights, based on my experience and judgment under similar conditions. The premises applied in each case are: First, the total average quantity of water available is 70,000 second feet, less 4,000 for navigation. Second, that one-half the quantity of water flowing in the river will be available for the proposed plant, or 33,000 second feet. Third, that the net average head acting on the wheels will be nine feet. Fourth, that the theoretical horse power on the above basis is 33,750 horse power. Fifth, that the cost of controlling
415 works, exclusive of the ground wood mill and power plant, would be practically $10 per theoretical horse power, about $337,000; that is, considering that the head works would be constructed for pulp mill uses only, not for regulating the flow of Lake Superior or taking care of any excess discharges. Taking the figures as compiled by Mr. Wallace, and making such corrections as thought necessary, I find that the fixed charges per ton capacity of the ground wood mill would be $2.52. That is made up by allowing the following charges on equipment: Interest, 6%; depreciation, 4%; repairs, 2%; taxes, 2%; insurance, 1%. On the construction: Interest, 6%; depreciation, 2%; repairs, 1%; taxes, 2%. The total cost will then be for producing one ton of pulp, exclusive of water power value: Wood, $10; labor, $2; fixed charges, $2.52; total, $14.52. In our recommendations for industrial propositions we always recommend that the apparent net income shall be 20%. Accordingly, we have added to this $14.52 20% of it, which is $2.90, making $17.42, the total value of pulp exclusive of water power. I have estimated that the average selling price at the mill would be $19.50 per ton of pulp. Subtracting from that the $17.42 leaves $2.08, the sum which should be capitalized to obtain value of power.

Now, one horse power in 300 days will produce 3.45 tons; so this $2.08 should be multiplied by 3.45, making about $7.18. That is the power at the coupling of the grinders. You must deduct from that the efficiency through the wheels and gearing in order to put the value on the theoretical power. I estimate that the efficiency of the wheels will be 75% and the gearing 95, approximately 71 for the combination. This makes 7.18 times 71 equals $5 per horse power as the rental value of the power. Multiplying the 33,750 theoretical horse power by $5 gives us $168,750 as the apparent income. On the same basis we claim that a client should see a net possible profit from a speculative scheme of 20%. We would capitalize that at 20%, making a total amount which a manufacturer could afford to invest of $843,750. From that, to get the value of the water alone, or the water rates of the power, we subtract the cost of head race, controlling devices, or, as previously stated, $337,500; leaving a
416 balance for the value of the water power of round figures a half million dollars.

I have also figured it on another basis; estimating that for complete water rights a client could afford to pay $15 per horse power, and that happens to figure to exactly the same value as the other; I didn't know it when I prepared the figures, $506,000; call it in round numbers $500,000. The way I obtain this figure is a matter of judgment. As I previously stated, the value of a water power may be from $10 to $28 a horse power. Assuming the title to be perfect for such a water power as is owned by the Chandler-Dunbar Water Power Company, and without Government interference, I should recommend that a client of mine should expend $500,000 if they could get a clear title to the property and the rights. I think $500,000 would be the limit.

I have usually been on the side of the buyer. I have been on the side of the seller several times. In the case of the 11,200 power, 75 foot head, I was on the side of the seller. I advised the sale of that power for $200,000, $18 per horse power.

I read from the report of the Hydro-Electric Power Commission of the Province of Ontario of 1908, page 20, article 16:

"I. The commission may, subject to the approval of the lieutenant governor in council, contract from time to time with a railway company or a distributing company or with any other corporation or person, for the supply of electrical power or energy."

Also from same report, page 21, article 18:

"In addition to the price per horse power payable by any municipal corporation under the terms of a contract entered into with the commission, which shall be the cost of the power to the commission at the point of development, or of its delivery to the commission, the corporation shall annually pay to the commission its proportion as adjusted by the commission of the following charges:

"(a) Interest at the rate of four per cent upon the moneys expended by the commission on capital account in the construc-
417 tion or purchase of the works.

"(b) An annual sum sufficient to form in thirty years a sinking fund for the retirement of the securities issued by the Province under this act for the payment of the cost of the works; and,

"(c) Line loss and the loss of operating, maintaining, repairing, renewing, and insuring the works."

Also at page 23, article 3:

"The contracts set out as Schedules A hereto between the said commission and the Ontario Power Company, of Niagara Falls, are hereby confirmed and declared to be legal and valid."

Also page 24, article 4:

"The commission hereby agrees to pay the company for such power so delivered under the terms of this agreement at the rate of $9.40 per horse power per annum for power at 12,000 volts, and at the rate of $10.40 per horse power per annum for power at 60,000 volts, and when the amount reserved and held ready for delivery upon the order of the commission is in all 25,000 horse power or more, payment shall be made at the rate of $9 per horse power or more per annum for power at 12,000 volts, and at the rate of $10 per horse power per annum for power at 60,000 volts. If power is taken at a higher voltage than 60,000 volts, the price shall be determined as hereinafter provided. The power shall be paid for monthly in gold coin of the present standard of weight and fineness in twelve amounts in each year at the office of the company at Niagara Falls, Ontario, and bills shall be rendered by the company on the 1st and paid by the commission on or before the 15th of each month."

Also on page 25, article 7, and after that article 9 on the same page:

"ARTICLE 7. The point of delivery shall be the property line between the company's distributing station and the right of way of the Michigan Central Railway at Niagara Falls, Ontario, Canada, and at or near this point on the company's land, the commission shall have the right to erect and maintain during the continuance of this agreement its initial line structure or structures.

418 "ARTICLE 9. The electric power herein contracted for shall be three phrase, alternating, commercial continuous 24-hour-power, every day of the year except as provided in paragraph 17 hereof."

In preparing an estimate of the cost of power delivered to the grinder shaft for electric current, as produced under a contract such as stipulated in this document, I have allowed for 1,000 horsepower as the basis at the power station, and one mile distance of transmission, with the transformers located in the consumer's buildings; a line efficiency of 90%; a transformer efficiency of 96%; the motor on the grinder shaft having an efficiency of 80%, or a total efficiency of 69% delivered to the consumers' coupling with the grinder shaft, making the total amount of power necessary to be purchased at the switchboard, for the transmission to the generating station, of 1,450 horsepower; estimated at the transmission line, would cost $7,000.

Cost of equipment at mill: Transformers, 1,000 horsepower, at $3.75, $3.750. Motor, 1,000 horsepower, at $10, $10,000. Total, $13,750. Incidentals, 20% of the above, $2,750. Total cost of installation, for consumer's installation, $16,500. Annual charges, 15%, $2,475; fixed annual charges for transmission line at 15%—and this I purposely made much higher than was called for in the requirements of the contract—$1,050. Cost for electric current, 1,450 horsepower, at $9.40, $13,630, making a total annual cost of the power delivered to the grinder coupling of $17,155, or $17.15 a horsepower. The price at which electric horsepower is sold in the various parts of the country depends entirely upon the local conditions, principally upon the cost as compared with the generation of steam power. Basing my estimate of cost at the switchboard, it will vary from $8 to as high as $20—what it costs the maker to produce it. This is not what the consumer has to pay for it.

And thereupon the United States called FRANCIS C. SHENEHON, who, being sworn, testified as follows:

I reside at Minneapolis, Minnesota; am a civil engineer, and am dean of the College of Engineering in the University of Min-
419 nesota. I acquired my technical education in that university. I was in private practice as an engineer at Sault Ste. Marie from 1888 to 1891. I was on the construction of Fort Brady part of the time. In 1891 I went on the construction of the ship locks at Sault Ste. Marie and on the river improvements in the United States Engineer's office. I was on that work until 1898, including some work on the United States Lake Survey, river gauging. In 1898 I went to Buffalo as engineer for the Deep Waterways Commission, to make hydraulic investigations of the Niagara River. In September of 1898 the Lake Survey took up the same work, and I was there until 1900, going then to the St. Lawrence River, making hydraulic investigations and surveys there during the years—the fall of 1900, 1901, and 1902. After that I was on surveys of the Great Lakes for navigation, and in 1906 the Lake Survey was charged with investigation at Niagara Falls with a view of "preserving the scenic grandeur of the falls," was the wording of the act. I refer to the Burton Act. I was there investigating that about two months. Then I returned to Detroit as chief civilian of the United States Lake Survey. It became my duty to have direction over this work. I wrote the report on the preservation of Niagara Falls. I have been at Sault Ste. Marie twice since this litigation, and made an investigation so as to determine the volume of water avail in the St. Mary's River there. The investigation on the volume available is mostly from records and the reports of the United States Lake Survey office. The surveys made by Mr. Sherman Moore in 1909 were initiated by me. He started out under my instructions to make those surveys, and the volumes of flow enter into the stipulation of the Board of Engineers' conference. I quote from page 101 of the In-

ternational Waterways Report. As regards high water or high discharge, I find 120,000 cubic second-feet discharge in July, 1876. I also find as low as 48,200 cubic second-feet discharge in February, 1893. The mean of the last 25 years is 74,900. The method that I should use in stating the amount of water available in the development of a power plant there at Sault Ste. Marie, having in
420 mind the market of Sault Ste. Marie, as I should regard it, of course, would be this: I find that the mean of months, January, February, March, April, May, and December, have a lower flow by about 90% than the mean by year. It is 90% of the mean of the year—that is the more accurate expression. Now, taking 90% of the mean flow of the last 25 years, give me rounding 70,000 cubic feet per second. The reason I take the last 25 years is because this table of discharge from Lake Superior is projected backward from observations taken beginning in 1896. I should say the observations getting too far distant from the date of the observations were likely to be in error. You take the whole mean of the 51 years, and then take a mean between that and the last 25 years, reducing by 90%, you return again to the flow of about 70,000 cubic feet per second. I should think that would be the proper flow to develop for. I take the half of 66,000 cubic second-feet and make my estimates upon the basis of 33,000 cubic second-feet. It is impracticable to equalize the flow. It would be practicable, perhaps, to nearly equalize the flow, but not to maintain the lake levels. The two things are antagonistic. You must choose between them. If you wish to regulate the levels of the lake—hold the levels uniform—you must accent the fluctuations. If, on the other hand, you wish to make uniform flow, you accent the rise and fall of the water; you do it at the expense of the level of your lake. The point is, the two are antagonistic.

I explain the matter of the effective head on the Chandler-Dunbar property in this way: The engineers in conference arrived at certain relations, and from those relations I draw out a balance sheet of heads, and by taking the head now for the flow I have taken, of 70,000 cubic feet per second, and the elevation of the water at the Southwest Pier gauge—that is, above the locks at the Sault—is 601.52. I have drawn up what I call a balance sheet of heads, and it reads this way:

The first item is: Fall, Southwest Pier to east line, 10.42. That is on the credit side.

2. Velocity head at the west line of the Chandler-Dunbar property; that is .04.

421 I sum those up, making 10.46, which is the total credit.

Then I charge up under 3 the loss Southwest Pier to bridge—that is, in the mean between the southwest pier and the international bridge—1.62.

Item 4 is a charge for velocity head at the east line, 0.83.

The total losses being 2:45; deducting 2:45 from the total credit side gives me an effective head of 8.01. That is the effective head

without dredging or clearing of the channel as it stands. As to the effect of ice in the production of power, in the case of a development which gave not too rapid water in the headrace—that is, between the bridge and the power house—you would expect some ice formation in the winter season, and when the water is running through a tube or with a friction on the top and bottom, it would consume more head in the headrace. That, however, doesn't enter into this consideration.

From the flow and the head that I have given as the basis of development, the theoretical horsepower on the Chandler-Dunbar property is 30,360, which would be 21,250 on the switchboard, with a 70% efficiency. This water-power proposition has many elements I should say of excellence as a water-power proposition. It has what might be regarded as a very uniform flow—perhaps fairly is a weak word in that respect. It has this great reservoir, Lake Superior, back of it, the rock foundations or the rock Potsdam sandstone over which the water flows. There could be no better foundation for your dam, your works to be erected. The two things that are against the power are the low head, first, and the unreliability due to the use of the power as a possible controlling works. I should say that this water power becoming trivial when considered in relation to the greater interests of navigation, and therefore the control of Lake Superior and even to some extent the passing of water down at the expense of Lake Superior to the lower lakes in time of need, as at the present time, must be at the expense of water power; therefore an unreliability comes in that is hurtful to the power. That is, the
422 regulation by the Government of the level of the lakes may be at the expense of developing power. That is a matter of fact. The Michigan-Lake Superior Power Company; I believe shutdowns there have occurred. At Buffalo the Niagara River has a fall of about five feet between the Black Rock and Buffalo that has been used in the past. I think there is an old gristmill there, and the development of power, and especially the electric transmission, distribution of power at Niagara, I imagine, accounts for that being relegated, passed by. In my report on the preservation of Niagara Falls I made the statement that there were five million horsepowers there—that is, from the head of the rapids to the river below—and I spoke of theoretical horsepowers at that time; and if that were all developed under a 70% efficiency it would mean three and a half millions horsepower at Niagara Falls.

I have a memorandum of the permit issued by the Canadian and American Governments at the Falls to bring the electric horsepowers across the border line and also of the two big American companies to take water from the Niagara River for power purposes. The Niagara Falls Power Company is permitted to take 8,600 cubic feet per second and it operates under 136 to 140 foot head. That gives 84,300 horsepowers. That is so limited under the Burton Act. That is on the American side. This company is utilizing only 140 feet out of a possible 220 that they might use. The Niagara Falls

Hydraulic Power and Manufacturing Company are permitted to take 6,500 cubic feet per second, and they operate under a fall of 210 feet. They produce 95,600 horsepower. The electrical horsepower or available head on the American side is 180,000 horsepower. The Canadian Niagara Falls Power Company develops 52,500 electrical horsepower; the Niagara, Lockport & Ontario Company, 60,000 electrical horsepower; the Niagara Falls Electric Transmission Company, 46,000 horsepower; making a total of 158,500 electrical horsepower, which under this permit comes from the Canadian side; and on the Amreican side 180,000 horsepower makes a total of 338,500 electric horsepower. If the Niagara Falls Power Company should utilize 200 feet of the possible 220-foot head, there would be 36,000 additional horsepower, making a total under
423 that consideration of 374,000 electric horsepower.

Between the level of the river at Niagara Falls, that is in the Gorge and Lake Ontario, there is a fall of something over 100 feet; there is the whirlpool rapids and the lower rapids, as they are called. None of that has been developed. Then when you reach the St. Lawrence River you have the Galops rapids. I don't know but before leaving the Niagara River I ought to make the statement that the flow of the Niagara River is something over 200,000 cubic feet per second. Then, returning to the St. Lawrence, which has a flow of somewhere in the neighborhood of 250,000 cubic feet per second, the first rapids is the Galops, and the fall there is about nine feet. There is no development there. The next rapids is the Rapide Platt, with a fall of about 11 feet. I believe there is a small development on the Canadian side taking the water from the ship canal there, an insignificant development. Then you come to the Sault rapids of the St. Lawrence, with a fall of about 50 feet. That is developed in part at Messena. They take water through a canal from what is known as the American Sault to Massena and discharge into the Rapid River, I believe it is. I don't know how much horsepower. Then when you get into the Canadian territory there are a long series of rapids, the Cedars, the Lachine, and so on; I don't know that I can name them all. I think they are largely undeveloped; I don't know in detail.

In Daniel W. Mead's work on Water Power Engineering—he is professor of hydraulics at the University of Wisconsin and a recognized authority as a water-power engineer—he says: "Financial considerations." This is paragraph 322, on page 646, of Mead on Water Power Engineering:

"Financial considerations. Every engineer who is called upon to advise as to the commercial feasibility of a proposed water-power development must carefully consider all financial aspects of the project, for on its financial feasibility the entire commercial success depends. It is not enough that the power be constant and sufficient in quantity, that the plant be well designed, and that
424 the cost of the same be reasonable; but there must also be a market in which the power can be utilized to advantage, and

the price at which the power can be sold in competition with all other sources of power must be sufficient to pay all expenses involved in the construction and operation of the plant and afford a fair return to those who assume the risk of the undertaking.

"It is a common belief that any water-power development must be profitable. Knowing that an undeveloped water power is a continual waste of energy, it is commonly assumed that the saving of this waste is bound to result in a profit to those who acquire the property and develope the power. That many water powers can not be developed at a profit under present conditions is a fact which in many instances is learned by its owner only after a large and unwarranted expense is entailed."

I quote from the report of the Hydro-Electric Power Commission of the Province of Ontario, October 31st, 1909, page 156, from the first paragraph:

"In the Lake Superior Power Company's charter is a clause designed to hold them responsible to both Federal Governments for the level of the water in the locks, which must at all times be held at or above a certain specified elevation. There are at present five channels through which the waters of Lake Superior can discharge, namely: The natural channel of St. Marys River, the American Lock, the Canadian Locks, the American Power Canal, and the Canadian Power Canal. It is evident that when these channels are discharging freely a large quantity of water in excess of the natural discharge is being drawn from Lake Superior, with a consequent reduction of water level in the locks. For this reason the American authorities during the past winter ordered half the wheels in the American plant to be shut down, at a loss to the company said to be in the neighborhood of $8,000 per month. If these plants are to be kept operating at full load without detriment to the nevigation interests, the free discharge of the main channel must be curtailed in such a manner as to compensate for the water drawn from Lake Superior by the artificial channels which feed the power plants.

"With this object in view, the construction of a compensating wing dam has been commenced on the Canadian shore, about 200 feet above the railway bridge. The two channels between the small islands have been blocked by the railway embankment, and the permanent works of the wing dam extend from the extremity of this fill."

This indicated that about 50% of the capacity of this company was shut off for a period. That would halve the load factor, although perhaps, not knowing exactly how all the elements of the load are made up, that may not be an accurate statement.

With reference to the method employed by wood pulp experts, which capitalize the profit of the pulp and the paper business as connected with the value of the water power as a proper method of figuring the value of the water power, I would say that the power must be considered in itself, and that any profits derived from the

sale of power would be a proper basis of capitalization; but when you add on a pulp mill and take the profits out of that, then add a paper mill to that and take the profit out of that, and capitalize the water power, it doesn't seem to me logically or technically proper procedure. I don't see why you should stop there. The paper might be made into books. I don't see why you shouldn't have a publishing house. The proper method in my judgment is simply to figure on the power itself. The product of the water is power, and the common kinds of power to-day are electric power or power on the shaft. I think the pulp mill should be regarded as a demonstration of the market for the power. Then what does the power cost to the pulp mill man? That, then, is the proper basis for figuring the value of your water power. If you have two removes from the power, that is, the pulp mill first and then the paper mill, why not three removes? I should say the limit was between the power and the pulp mill.

I think the Chandler-Dunbar Water Power Company prop-
426 erty is worth somewhere between half a million and a million dollars for the purpose, including its purpose for ship locks and whatever used it may be put to, and my figure is purely arbitrary. I would consider a low-head power of this kind much as I would low-grade ores; not at the present time valuable, but of value in the future. I therefore think that a purchaser could be found who would be willing to pay somewhere between half a million and a million dollars for the power, and that is upon the theory that he would wait until some time when he could sell it. This is simply my view. I have not been in the habit of buying and selling water power. I have not had experience in the financial end of it. I can not figure it out that it would be a wise move to go up there and develop that power to its full capacity at the present time.

On cross-examination, among other things, the witness testified:

The regulation of the Lakes should begin with Lake Ontario. That lake should be regulated at its foot; then when you get to Lake Erie regulate it at its foot; when you get to Lakes Michigan and Huron, regulate them; when you get to Lake Superior, regulate that at the foot. I do hope some day to see regulating works in all these places.

I don't know that there was ever any drawing on Lake Superior for the raising of the levels in Lake Michigan before this time. But I fully acquiesce in doing it at the present time.

The Detroit River commerce, which includes Lake Erie and reaches up into Lake Huron and Michigan, as well as Lake Superior, is greater than the Lake Superior commerce alone. These Lakes, Erie, Michigan, and Huron, are reaching a low stage that corresponds with the record low stage of 1895–6. The effect of this low water on Lakes Michigan and Huron reaches up and lowers the water on the floor of the Poe Lock at Sault Ste. Marie, which is the critical point in the St. Marys River navigation. The low water in Lake Erie

affects and the critical point is reached in the vicinity of Amherstberg, which affects practically all the Detroit River commerce, and, for that reason, to draw Lake Superior down at the present time so that the draft on the upper miter sill of the Poe Lock is about the same as the draft on the lock floor looks to me like good sense.

Colonel CURTIS MCD. TOWNSEND, a witness produced on behalf of the petitioner, testified as follows:

I am located at Detroit, in the Engineer's Department of the Government service. I have been with the Government since 1875, and as an engineer since 1879. I have had charge of the Detroit office three years, and as the engineer in charge have charge of the waters connecting the Great Lakes. Beyond the water used to propel the ships through the locks, and the floating of forest products, navigation always needs the water for controlling the levels of the Lakes. The Poe Lock and the new lock are based upon a fixed elevation of Lake Superior and the Lakes below. We base our work on what we call datum plans. That is this: There are certain levels of water above and below our improvements, and we make these improvements so many feet below a datum plane, and it is essential that we
427 should keep the levels to those planes, or above them, in order to have the depths in our channels which we are endeavoring to obtain; and the Government should have the water of St. Marys River for that purpose. There is a rock formation both above and below the international bridge. Its crest is just above the international bridge and extends across the river. That is the dam which creates Lake Superior, and it backs the water up and makes the lake. It is the natural ridge of rock. I do not think it would be at all wise for the Government to permit the excavation of that natural dam and be required to depend upon an artificial dam owned by a private company or private individuals. That dam naturally regulates the water supply or the height of the water of Lake Superior, and I think it would be very much better to leave it to nature than to put in a company that is organized for commercial purposes. Lake Superior is the best regulated body of water that I know of by nature.

In my official capacity I have been on numerous boards that have had to investigate questions of navigation. I am now a member of a board which is investigating the subject of a deep waterway from Chicago to the Gulf. The report of that commission has not been published.

I have closed down the canal of the Michigan-Lake Superior Power Company every winter except this winter, and my impression is that two winters we closed it entirely a portion of the time. One winter we closed them down entirely, and the other one we allowed them to run one wheel. That was because the waters of Lake Superior were getting lower than they should be. The harbors of Lake Superior are based on a plane which is similar to the one I mentioned in reference to the locks at the Sault. We have a plane below which we excavate, and if the water falls below that plane we have not the depths

in our harbors which we expected to have. 601.5 and 603 are the limits which we regulate the Michigan-Lake Superior Power Company to. 601.5 is the elevation of our datum plan for improving the new lock. I am not sure that that is the datum plane on Lake Superior, but it is substantially that figure—higher if anything. The shallowest water in our navigable water way from Duluth down through the chain of lakes would be the lower miter sills of
428 our lock, or the floor of the locks. I refer to the Poe Lock, Canadian Lock, and the Weitzel Lock. We are attempting now to control the levels of the Lakes. The manner used is to allow the water to flow through the Michigan-Lake Superior Power Company's canal. They are allowed to flow 10,000 cubic feet a second. They have never used 32,000 cubic feet a second, but they have generally flowed from 10,000 to 12,000 cubic feet a second, and they have been allowed to use the amount this winter that they were using last summer. The Chicago Drainage Canal is now withdrawing 7,000 cubic second feet from Lake Michigan. In the absence of an agreement between the two Governments, the individuals could dig channels of indefinite size without being stopped by the Government, and either one or the other could take all the power, and each side might successfully destroy the power on the other side; but the Government will never consent to that. There is an international treaty and the two Governments are now working perfectly in harmony in maintaining the levels of these lakes, and they will not permit any such action.

Cross-examination:

Q. Have you ever considered the question of remedial works in the river for the purpose of regulating the flow of Lake Superior and maintaining the present level between the limits that you have given of 601.5 and 603?

A. Yes, sir; I have considered it.

Q. Have you considered the placing of such remedial works so far that you have one or more feasible places in your mind for the location of them?

A. For the location of remedial works?

Q. Yes.

A. Yes.

Q. Among such feasible places is not this rock dam——

The Court (interrupting). The crest?

Q. No, I was not thinking exactly—if I understand exactly what he means by crest—I was not thinking of the crest, but near the crest, on one side or the other of the international bridge, been considered by you?

A. To a certain extent, yes.

Q. Of course such a works would be, in your judgment, in aid of navigation, and not interferring with navigation.

A. The construction of compensating works would be beneficial to navigation, I think.

Q. How?

A. The construction of compensating works I think would be beneficial to navigation.

Q. And such compensating works would not necessarily interfere with the development of water power in the rapids?

A. To a limited extent.

Q. They could be so located, could they not, as actually to increase the amount of power development within the rapids?

A. I don't think that they could.

Q. Why not?

A. Because I do not believe that it is capable of regulating Lake Superior any better than it is now being done by the Creator.

Q. By what?

A. By the Creator. I think he has limited Lake Superior as far as it is practicable to do it at the present time.

Q. Does not the very idea of compensating works necessarily imply that the level of Lake Superior will be kept above the point where it has sometimes fallen to during the past few years.

A. Where I make the difference between compensating works and a regulating work is this: the object of a compensating work would be to compensate for any water or any damage that was done to the flow of Lake Superior by man in the way of a power company; and regulating works would be a dam to change the oscillations of Lake Superior, and I don't think that that is practicable.

Q. The only openings in Lake Superior that need to be compensated for the Michigan Lake Superior Power Company's plant and that of the Canadian?

A. And the Canadian Power Company.

* * * * * * *

Q. Is it your judgment that if there were no such openings as the Michigan-Lake Superior Power Company's plant, and the opening made by the plant on the Canadian side, that no works could be put in that river that would measurably increase the level of Lake Superior, so as to allow a somewhat if limited increase in the flow of that river in low periods?

A. It will raise Lake Superior, but you have your oscillations on top of that level.

Q. How?

A. You can raise your level of Lake Superior as much as you want to, but you will have your oscillations on top of that level; if you put a dam across there to raise the level of Lake Superior three feet or five feet, those oscillations which occur by nature will occur after you have built your dam.

* * * * * * *

I call your attention to this language: "The uniformity of flow in that river is essential to the best interests of navigation of the river itself."

A. Yes.

Q. Now if you could improve on that uniformity of that flow it would be a good thing?

A. It would be, if you could.

Q. Such a dam as you have yourself suggested, properly arranged with proper gates, do you say that that uniformity could not to some extent be increased?

A. I think that the chances are that the men that tried to do it, instead of improving the job would make a failure of it and would do worse than the Creator has.

L. C. SABIN recalled for further examination by counsel for the Government:

The Governments Exhibit 58 is a photograph of the restored Northwest Fur Company's lock, built in 1797. The description on the back of it was taken from the Annual Report of Statistics concerning the St. Marys Ship Canal. It reads: "The first canal was built on the Canadian side of the river by the Northwest Fur Company in 1797–8. The lock was 38 feet long, 8 feet 9 inches wide, with a lift of 9 feet. A towpath was made along the shore for oxen to track the batteaux and canoes through the upper part of the rapids. The lock, excepting its timber floor and miter sills, was destroyed in 1814 by U. S. troops from Mackinac Island under command of Major Holmes."

Which exhibit was received in evidence.

Exhibit 59 is a sketch of St. Marys Rapids in 1850, from Judge Steere's collection.

This exhibit was received in evidence,

429 Government Exhibit 60 was received in evidence.

The indorsement on Exhibit 60 is: "Steamer 'Chicora' (Canadian); net registered tonnage 372.83. 1868 was first year she passed through the State Canal."

The description on the back of this exhibit is: "The first ship canal, known as the State Canal, was built on the American side of the river in 1853 to 1855, some 750,000 acres of land in the State of Michigan having been granted by the United States Congress for the construction thereof. The canal was $1\frac{1}{2}$ miles long, 64 feet wide at bottom, 100 feet wide at water surface, and 13 feet deep. There were two tandem locks of masonry, each 350 by 70 feet, having $11\frac{1}{2}$ feet of water on the miter sills, and a lift of about 9 feet each."

Exhibit 61. View of State Canal. Received in evidence. View of State Canal, showing down lockage of fleet from upper to lower down.

Government Exhibits 62, 63, 64, 65, and 66 were received in evidence, and represent the conditions after an accident to the Canadian Lock in June, 1909.

The memoranda on the back of the same were prepared in my office.

On the back of 62 appears the following indorsement: "June 9, 1909. Canadian Lock accident. Lower gates just after accident.

"The Canadian canal, 1⅛ miles long, 150 feet wide and 22 feet deep, with lock 900 feet long and 60 feet wide, having 22 feet of water on the miter sills, was built on the north side of the river in 1888 to 1895."

On the back of Exhibit 63 is the following indorsement:

"Upper end of lock, looking west. Just after accident. Showing recesses of upper gates."

On the back of Exhibit 64 is the following indorsement: "Looking east from upper end of lock."

On the back of 65 is the following indorsement: "General
430 view of movable dam, looking up stream; most of girders and wickets in place."

On the back of Exhibit 66 appears the following indorsement: "June 10, 1909. Lower gate. South leaf tipped over."

Those pictures represent the occurrence when the "Crescent City" and the "Somerset" were involved in the situation.

Government's Exhibit 67 was received in evidence.

This photograph represents a steamer in the Poe Lock, the "Frank J. Hecker," the dimensions of which are given on the back of the photograph.

The indorsement on the photograph is: "Steamer 'Frank J. Hecker' ground in Poe Lock. Net registered tonnage, 3,770. Length over all, 482 feet; beam, 50 feet."

Government's Exhibit 68 was received in evidence.

This is a picture of a boat similarly grounded in the Weitzel Lock. That was quite a frequent occurrence before the opening of the Poe Lock; that vessels were loaded to the limit of draft and were frequently pulled out by tugs.

On the back of the exhibit appears the following indorsement: "View showing steamer 'City of Glasgow' grounded in Weitzel Lock, being pulled off by three tugs. 1895. Steamer 'City of Glasgow,' net registered tonnage, 1,672.03. Length over all, 312 feet; beam, 41 feet."

Government's Exhibit 69 received in evidence.

This is a fleet of vessels waiting to pass the locks, because of the ice conditions in the river being such that they could not proceed at the time. The indorsement on the back is: "View showing 19 vessels waiting to pass through locks, being part of fleet of about 240 vessels delayed at St. Marys Falls Canal between April 24 and 29, 1907, on account of ice in river above canal."

Government's Exhibit 71 received in evidence and made a part of this bill of exceptions.

This represents the jamming of two boats in the canal above the locks in the navigation canal while they were attempting to pass, one going down and the other coming up, and the combined width of the boats was greater than the width of the canal at the point where they came together. They were the steamers "Stein-
431 brenner" and "Perkins," and it occurred September 11, 1906. This occurrence emphasized the fact that another canal was

desirable, which has since been provided. The indorsement on this photograph is: "View showing steamers 'Perkins' and 'Steinbrenner' jammed below the canal head gates, St. Marys Falls Canal, Michigan, while attempting to pass each other, September 11, 1906. Steamer 'George W. Perkins,' net registered tonnage, 4,922. Length over all, 569 feet; beam, 56 feet. Steamer 'Steinbrenner,' net registered tonnage, 3,955; length over all, 436 feet; beam, 51 feet."

Government Exhibit 72 received in evidence.

This represents 25 vessels lying at the piers waiting to pass through the river, being part of a fleet of 181 vessels delayed above and below the locks at the canal by a blockage of the channel at Sailors' Encampment by the steamer "Douglas Houghton," September 5 and 10, 1899. There were 25 vessels in this picture. There were during the time of this blockage 181 vessels delayed.

On the back of Exhibit 72 there appears the following indorsement: "View showing 25 vessels at piers waiting to pass through river, being part of fleet of 181 vessels delayed above and below locks at St. Marys Falls Canal by blockage of channel at Sailors Encampment by the steamer 'Douglas Houghton' between September 5 and 10, 1899."

At this point the Government offered in evidence an extract from the report of the Weather Bureau of the U. S. Department of Agriculture, being a part of the published official report of said bureau for the month of December, 1899, which was received in evidence, and reads as follows:

"A few items from the Soo report of 1899 are interesting as tending to show the magnitude of the vast commerce that passes through the Sault de. Sainte Marie Canal. The Bureau of Statistics at Washington gives the following figures regarding the vessels and the tonnage passing through the canal during the past year:

" Vessels, 20,255; tonnage, 21,958,347; bushels of wheat, 58,397,355;
other grain, bushels, 30,935; number of barrels of flour,
432 7,114,147; iron ore, tons, 15,328,240; feet of lumber,
1,038,057,000; passengers, 49,082.

" The great blockage of the Soo River September 5th to 10th, 1899, by the 'Douglas Houghton' brought very forcibly to the attention of the public the enormous traffic which is plying the Lakes. The steam 'Douglas Houghton,' bound down with the steel barge 'John Fritz' in tow, parted her rudder chains at Sailors Encampment on September 5th and swung across the channel, completely blocking it. The 'Fritz' collided with the 'Houghton' amidship, damaging her considerably and at the same time forcing her more firmly upon the rocks on either side of the channel. The 'Houghton' was released on the 10th and the fleet of about 200 vessels that had been delayed pending her release began to move down the river. The 'Houghton' was repaired temporarily and proceeded to her destination under her own steam. It was estimated that marine interests suffered a loss of a million dollars on account of the blockade.

"It is stated that more vessels were delayed in the St. Marys River on account of this blockade than from any obstruction of like character in former years. It will thus be seen that the boat, although very valuable and carrying a large cargo of great value, was but a small part of the loss when compared with the delay caused to shipping. When the blockade of the channel was finally broken on the afternoon of September 10th the largest fleet ever assembled at one place on the Lakes, if not in America, began to move; two hundred of the largest water craft sailing under the American flag had been held. An idea of the enormous business they represented may be conceived by stating that the down bound part of this large fleet carried 300,000 tons of iron ore, 11,900,000 feet of lumber, and 900,000 bushels of wheat, besides large quantities of flour and general merchandise, and made a procession forty miles in length. This enormous fleet of 200 vessels, with its great cargoes, is only the amount represented by a five-days' compulsory stoppage of navigation through the Soo Canal. After the blockade in St. Marys River was broken 154 vessels passed Detroit between midnight September 12th and midnight September 13th.

433 "The commerce of the Great Lakes has grown to astonishing proportions, and many people do not realize its great magnitude. Comparing the Sault Ste. Marie Ship Canal with the Suez Canal, it may be said that two and one-half times as much tonnage passes the Soo Canal in nine months of the year as passes the Suez Canal during the entire twelve months. There is more registered tonnage passing through the Detroit River in nine months of the year than enters and leaves all of the combined ports of the United States; also more than that of New York, London, and Liverpool. In the season of 1895, 17,956 vessels passed through the Sault Locks, having an aggregate net registered tonnage of 16,806,781, carrying 15,062,530 tons of freight, the estimated value of which was $159,575,130. During the twelve months of that year 3,334 vessels of a net registered tonnage of 8,448,246 passed through the Suez Canal. By way of further comparison, it may be roughly stated that in the same year 30,000 vessels with a tonnage of thirty million entered and cleared all ocean and Gulf ports of the entire United States. A committee of the Lake Carriers' Association reported in January, 1896, that slightly less than thirty million net tons of freight had been carried by vessels passing the city of Detroit in the year 1895. This statement was based in part upon estimates and it does not include the commerce between ports on the upper Lakes, such as that between Duluth and Chicago. There are about as many clearances of vessels of Lake ports as there are from all the sea ports of the United States. The following statement of the passages of vessels through the Detroit River during the season of 1899 is furnished to the Weather Bureau through the courtesy of Postmaster F. B. Dickerson, Detroit, Michigan: Total number of passages during the season, 22,741. This is 637 more than were reported during the season of 1898.

"The number of weather maps furnished to vessel masters through the marine post office at Detroit during the season was 16,200; weather forecasts, storm warnings, and afternoon reports of wind direction and velocities at Lake stations, 22,500. These reports were delivered directly to the masters of vessels while passing Detroit."

434 Government Exhibit 77 was received in evidence. It is a photograph giving a view showing 50 vessels below the locks awaiting opening of Poe Lock, May, 1910. Part of the indorsement on the back says: "When the Poe Lock was opened, there were 66 vessels up bound and 65 vessels down bound, or a total of 131 vessels, awaiting lockage."

Government's Exhibit 78 was received in evidence. It reads as follows:

"*Memorandum of blockades due to accidents at St. Mary's Falls Canal, Michigan.*

No.	Date.	Blockade existed.		No. of vessels delayed.	Aggregate delay to vessels.	Cause of blockade.
		Days.	Hrs.			
1	July 31, 1890	3	8	265	.....	Broken valve in Weitzel Lock culverts.
2	Aug. 4, 1899	.....	32	.....	.....	Str. Sir Wm. Siemens collided with south leaf upper operating gate.
3	June 9, 1901 (See C/E report, p. 3183.)	7	4	.....	.....	Str. Wm. R. Linn collided with southeast operating gate, Poe Lock.
4	June 6, 1902 (See C/E report, 1902, p. 2226.)	4	15	Ninety vessels were awaiting lockage when bridge was swung clear of canal, although Canadian Lock was in continuous operation.		Railroad swing bridge knocked off foundation by barge Maderia in tow of str. Douglas Houghton.
5	Nov. 10, 1909	7	12	.....	.....	Str. Isaac L. Ellwood rammed south leaf of upper operating gate, Poe Lock.

"CANADIAN CANAL.

1	June 9, 1910	12	.....	.....	.....	Lower lock gates rammed by str. Perry G. Walker and carried out.
2	Sept. 5, 1901	6	.....	Little, if any, delay to vessels, the American Canal being used by all vessels.		Canadian Canal closed while stepping new lock gates."

435 Government's Exhibit 79, received in evidence, is a blue print showing the volume of freight in millions of short tons yearly average St. Marys Falls Canal freight traffic. Means five-year periods. I made it. The significance of this is that the freight for each five-year period, starting with 1865, the mean freight in each five-year period was taken out and planted on this diagram, the figures at the left meaning the millions of short tons. Running up and down are these five yearly periods. The object of grouping them in means of five years is to smooth out the curve that the

freight volume varies with the different financial conditions of the country and other things. It makes a jagged line if plotted for each line. In order to take that out and make a smooth line we take the amount for the fifteen-year period and plot it this way, and the curves we derive are for the total freight; also for the iron ore and for the coal and for all other products. That comes down to 1909, inclusive. Now, the direction of the line starting in from 1865 and coming up to 1910, that is marked "Total freight," indicates that the tendency is to go upward. The significance of the diagram is simply an indication of what may be expected in the future based on what has occurred in the past. If it is assumed that the traffic in the future is going to grow for the next five years at the rate that it grew for the last five years, it would be possible to predicate what the yearly freight would be five years from now.

The memorandum marked "Government's Exhibit 80" was received in evidence. It is a memorandum of blockades due to accidents in St. Marys River other than at St. Marys Falls Canal. This is compiled from the official reports in the engineers' office at the locks.

Said memorandum reads as follows:

"*Memorandum of blockades due to accidents in St. Mary's River other than at St. Marys Falls Canal, Michigan.*

436

No.	Date.	Blockade existed.		Number of vessels delayed.	Aggregate delay to vessels.		Cause of blockade.
		Days.	Hrs.		Hrs.	Min.	
1	Oct. 10, 1891	5	1¼	275	19,853	12	Sinking of str. Susan E. Peck in Lake George, caused by collision with schr. Geo. W. Adams, upbound in tow of str. Aurora. Blockade raised by dredging new channel around str. Peck.
	(See report of Mr. E. S. Wheeler, genl. supt., dated Oct. 31, 1891; L. B. 5, p. 868.)						
2	Sept. 5, 1899	5	1¼	332	11,706	38	Str. Douglas Houghton swung across channel at Sailors Encampment, and was struck amidships by her consort, John Fritz.
	(See Senate Doc. No. 80, 56th Congr., 1st sess.)						
3	Nov. 28, 1899	3	10¼	167	7,152	49	Str. Sir Wm. Seimens and consort Alexander Holly and str. North Star sheered and brought up on channel banks at upper entrance to Hay Lake (Little Rapids Cut).
4	May 21, 1910	2 weeks (May 22–June 4).		.....	.....	.....	Str. John B. Ketcham, 2nd, sunk in center of West Neebish channel near upper dam. All vessels used Middle Neebish channel during blockade.
	ICE JAMS ABOVE CANALS.						
1	April 8, 1905	.....	.....	.....	.....	.....	Strs. J. T. Hutchinson and Sultana stuck in ice Apr. 8 to 19, or about 11 days, below Whitefish Pt. down bound. Tug Algoma broke channel through Apr. 19, having been chartered for that purpose by Colby and Tomlison.
2	Apr. 8, 1909	About 10 days.		About 100	.....	.....	Ice jam in Whitefish Bay (100 vessels delayed from 1 to 10 days).

On his cross-examination, he testified:

Referring to the letter of May 3, 1907, sent by the Chandler-Dunbar Water Power Company to you, covering a quitclaim deed, the steel conduit referred to in that letter was extended beyond the width of the widened canal?

A. Not as a steel conduit, but something that took the place of it. The area which was to be filled is shown on the blue print. Land which we intended to use as a dumping ground. This map (24), D. Ex., represents fairly correctly the area which was actually filled. It is the area of land north of claims 95 and 96 and beyond the dock of the Chandler-Dunbar Company, a strip about 250 feet wide and perhaps a thousand feet long or more. That was used as a dumping ground. A part of it was filled in pursuance of that letter.

The Government never built the proper fill and grade that this letter required it to build. Instead of that we built a connection on the east side of the bridge. It was more easily built there and that letter contemplates, I believe, the construction of a new canal which would render the track useless.

To carry out the agreement of the Government, we were to maintain the track in its previous location, on the east side of the bridge, by shortening the curve enough so that that was fairly satisfactory to the Chandler-Dunbar Company. Since that time we have extended the embankment so as to improve conditions somewhat and permit a locomotive to come down.

Perhaps that strip that we filled covered 7 or 8 acres.

Worth $100 an acre without water rights.

Q. Wasn't that expressly put there for the Chandler-Dunbar Water Power Company to have a place for warehouses and a railroad track?

A. At one time that may have been considered. At the time it was actually put there I don't remember whether that was the view or not. I think that that may be said to have been put in for the special use of the Chandler-Dunbar Company.

This, as a matter of fact, was a dump we intended to make, and in my first report, recommending the acceptance of this proposition, I stated that we would in any case have to make such a dump, but perhaps not extended it so far east. I think we should not have extended it so far east had it not been requested.

I think the east part of that dump was constructed in the latter half of 1909 and 1910.

By Mr. Gorr:

Q. Whether any part of the construction that you made there for the Chandler-Dunbar Company was under any oral understanding, or was it all according to some written understanding?

A. I usually discussed with Mr. Chandler any things that I was going to do over there that I thought would affect him, and if they were things which we could do one way or another as well as not I did them as he would like to have them done sometimes.

ALEXANDER G. BURNS, a witness for the Government, being duly sworn, testified as follows, on direct examination:

I am weather forecaster at the local office of the U. S. Weather Bureau, Sault Ste. Marie, and have been located there over 13 years. The office is located on the Government reservation, within two or three hundred feet of Weitzel Lock and less than 100 feet from the canal. Boats were sometimes detained by fog anywhere from two to three to twelve hours or more. Last season on one occasion
437 I saw boats pass through the Poe Lock between 7 and 8 in the evening and saw them there again the next morning between 7 and 8 in the same lock. There were quite a number in that fleet, as I remember, probably 15 or 20 bunched up there. It was light enough to get up the river, but the fog was too dense to proceed further. I have seen them coming down late in the morning, or during the afternoon, 15 or 20, perhaps more of them, trailing one right after the other, showing there was a fog at Iroquois Point. I have very often seen groups of boats coming down the river after a fog lifted, and waiting at the pier to get lockage through. I have seen the same thing with reference to boats coming up. I remarked about a fleet that came up last summer, about the middle of the afternoon they began coming around from Little Rapids, one after another, from downstream, 15 or 20 of them, I don't remember how many, quite a lot. The delay in getting such a bunch through the locks depends on the size of the boats. You take a half dozen 600-footers, 58-foot beam, and it is going to be slow work. I have seen that many there at a time of that size. Two years ago there was an ice blockade in Whitefish Bay that caused boats going up or down to stop. When they finally broke that blockade at Iroquois Point and Whitefish Bay, there must have been a hundred or so come down. Of course that would be a serious fleet to take care of. That occurred a couple of years ago. Have known of there being better than 100 there at the time of an accident. That occurred twice, I think; a hundred or better on two instances that I recollect. That many would be arriving at the Sault at the same time, and a great many of them would have to anchor above the Sault, that bay on the Canadian side. There is no chance to tie them up at the locks. It would take two or three days to lock these squadrons through. Another occurrence took place where they were coming through at the Sault in bunches, was that they smashed the railroad bridge. I think that was about four years ago. That caused great detention and boats were very slow in getting through; it wasn't anything like the ice blockades, of course, because the Canadian lock was in operation and could slowly
438 drain them out. I have personal recollection in regard to *to* the "William Seimens," which collided with the south leaf of the upper operating gates. It caused about a day's detention. It is marked 32 hours. At the time the "Seimens" blockaded the Little Rapids Cut, there were over 100 boats at the Sault then detained on each side of that nearly three days. I was in the office when the "Ellwood" struck the gate last year, the gate of the Poe

Lock. After that all the big draft boats had to go to Canada. That caused a great deal of detention. I can't say it would compare with the ice blockade I spoke of, at the same time there was serious detention. They used the Canada Lock, but it couldn't begin to take care of what came down with any kind of dispatch.

Thereupon the Government called HARVEY D. COULDER, who being duly sworn, testified as follows:

I live in Cleveland. I am general counsel for the Lake Carriers' Association. I am familiar with the general aspects of the navigation situation on the Great Lakes, broadly speaking. I have been a practical navigator in my early life; from close contact and study of the navigation situation and conditions on the Great Lakes, I am familiar with the necessities and interests of navigation on the Great Lakes, and particularly at Sault Ste. Marie. I have been very closely identified with it and with all of the movements for its improvement, the improvement of channels, the elemination or prevention of obstructions, as, for a concrete example, the question of bridging or having piers in the Detroit River, a matter that I have been earnestly engaged in during the controversy on behalf of the shipping and navigation interests. I have made a study of the situation from the navigation standpoint on the Great Lakes, as forming an inclusive and homogeneous system for their improvement. My opinion as to the necessity of the United States Government having absolute control of the entire river at Sault Ste. Marie is that it should have that control, in the interest of navigation. It is perhaps difficult, in such contact as my own has been with all that subject, to distinguish between argument and even opinion. I have regarded it, re-
439 peatedly so expressed myself, and believe that the Government should control, the Government should have taken that in reservation years ago and should have the control for the interests of the navigation, not on the basis of a present necessity, but for the present and the future as based on what is and the development up to the present point. I was present at the meeting of the Lake Carriers' Association in January, 1906. The Lake Carriers' Association is composed of men who own or directly manage lake vessels. This association is one not a business association at all—commercial association—but it is like some civic organization, to focus and give expression, and the most forceful expression, to the interests of the Great Lakes in other respects than the mere management and operation of the property. It was for years, beginning in the early eighties, a voluntary association, wherein the membership was renewed each year, and because of its holding its convention in midwinter, in January, and there forecasting certain things for the following season, and that the voluntary enrollment was not until the spring, perhaps not necessarily until spring, it was desired to have some continuity of membership, and the plan was hit upon of having a corporation with a nominal amount of stock, so that a man

became a stockholder he wouldn't have to renew, wouldn't have to be bothered about renewing; it was taken for granted that he continued a member until he signified his desire to retire; and so I think that the shares of stock were made at a nominal figure, a dollar a share, and one dollar to represent 100 tons of tonnage, and that no membership should issue, I think, except to some party, some person, managing or representing at least one vessel. It so took in all of a very large proportion of the carrying ships of the Great Lakes, but not all. For instance, the passenger lines have an association of their own, because their business, their whole operations, are so distinctly different in many respects. The same is true of what they call package-line boats. So that the Lake Carriers' Association came to include in its membership the bulk freighters, the noncommon carriers. Those meetings are attended by all the way from 150 to 250 people. I recall that in a statement made before the congressional committee my recollection then was 200; that was confirmed by
440 Mr. Livingston, and I think that is about right—200 men.

As I have stated, the members are the noncommon carriers; they are engaged principally in the bulk freighting, and that includes the ore and grain and coal trade—that is the principal trade to Lake Superior—and lumber; the lumber men, they have their own organization on account of their different characteristics, but it is the coal, ore and grain ships, the bulk of the freight.

The resolution that this association passed that I referred to above reads as follows:

"Resolved, That we declared our opposition to any works in progress or any encroachment on the lands or waters north of the Government canal, all which waters, owing to the great and rapid growth of tonnage on the Great Lakes, will be required by the Government to make suitable provision for the needs of navigation in the near future. That levels must be maintained, navigation must be protected, the public must have absolute right to use any portion or all of the natural flow in the future free of any private use. And we, therefore, declare our opposition to any works in progress and call upon the Government to clear the rapids from all encroachments and private improvement of any kind, and if the parties operating these have vested rights that the Government acquire the same in a proper and just manner. This action is taken upon the firm conviction that the needs of the country demand that the whole space north of the present locks and Government works out to the international boundary line are required and will be rapidly utilized for navigation purposes."

I have quoted here from the International Waterways Commission. The report is addressed to Hon. William Livingstone, president Lake Carriers' Association, and reads thus:

"Report on the situation at the Sault may begin with the resolution adopted at our annual meeting January 12, 1906. After calling attention to encroachments on lands and waters north of the Govern

ment works, it was resolved,"—. Then follows the resolution already read:

"The International Waterways Commission, composed of three commissioners from each the United States and Canada, has
441 had at least one public hearing, its members have visited the Sault, have studied the situation comprehensively, and on May 3, 1906, report and recommend:

"1. That no permit shall be granted for the use of the waters of the St. Mary's River or for the erection of structures in, under, or over, or the occupation, in any manner, of the said waters, until plans have been submitted to the commission for its investigation and recommendation; and the use of the waters under such permits shall not be allowed except upon compliance with the rules hereinafter recommended.

"2. The commission further recommends that no grants, permits, or concessions shall be made which directly or by operation of law may in any manner affect the right of the United States or of Canada to control the bed of the St. Mary's River below high-water mark, and especially that none shall be made which, legally or equitable, may be the means of adding to the expense of acquiring lands or rights for the purpose of making improvements in aid of navigation or which may give an equitable right to compensation in case of the removal of structures in said river.

"3. That steps shall be taken to increase the lockage facilities at Sault Ste. Marie without unnecessary delay." That is the end of the quotation there. My report proceeds: This report presents statement of encroachments now in progress without sanction of Congress or of Canada in this international boundary water, and I again quote from the report:

"In 1883 William Chandler was granted letters patent for a strip of land about 3,000 feet in length lying along the north side of the St. Mary's Falls Canal, adjoining the rapids on the American side of the river. In 1887 the Edison Sault Light and Power Company was organized for the purpose of developing water power at this point, and the following year a canal about 2,200 feet long was dug through this property, the power developed being used locally, largely for electric lighting.

"In 1847 the President of the United States formally reserved said land for public uses, and, according to the contention of the Attorney General in the suit pending, this reservation still exists."
442 On November 3, 1881, Major Weitzel, Corps of Engineers, said, in his report to the Chief of Engineers, of this shore land:

"It will undoubtedly become valuable in the future for additional canal enlargements and improvement. I do not know what is necessary to make an appeal in such a case successful, but if anything can be done by the Government in this matter it should, in my opinion, be done."

November 11, 1881, Secretary of War Lincoln made requests to the Secretary of the Interior:

"That such measures may be taken in the premises as will protect the interest of the United States in this property, which will undoubtedly become valuable in the future for additional canal enlargements and improvements."

May 19th, 1885, Colonel Poe, Corps of Engineers, reported to the Chief of Engineers, as to the islands lying off the north shore of the United States Ship Canal, as follows:

"The islands are useful to the canal, and in case of its further enlargement as proposed, will be particularly so; even if they were not useful, the title should be retained in the United States, since their ownership by private individuals might be made the basis of obstructions to the canal, the facilities of which are greatly encroached upon already."

September 26th, 1888, Colonel Poe reported to the Chief of Engineers:

"The necessity for this action at an early date is greatly increased by the fact"—I will say aside I don't recall just what occasions he was speaking of, I was simply getting his expression about this place. "The necessity for this action at an early date is greatly increased by the fact that the contingency referred to in my report of May 19, 1885, has since arisen, and we are now actually engaged in the further enlargement of the canal. The canal requires the reservation of every square foot of public land yet remaining in its vicinity.

"Not merely the immediate shipping interests of the Great Lakes, the mines of iron above and of coal below which owe the possibility of operating to proper development at the Sault, the great
443 wheat fields of the Northwest which are dependent, the cities which have been built up directly through cheap lake transportation, vitally as all these are concerned, but the whole Nation and its people have a direct and profound interest in the subject, of which the International Waterways Commission say (p. 4):

"'That in a single year, 1905, by transporting the Lake Superior freight on the Great Lakes, $116,000,000 were saved to the producers of the raw materials, the manufacturer, and the consumer, and the saving to manufacturers has made it possible for them to supply the home markets and compete in foreign markets.'

"To this the commission might have added that while the iron ores of the Lake Superior district produced some 83 per cent of the output of pig iron of the United States, which exceeded that of Great Britain, Germany, and France combined, yet out of the total value of commodities passing the Sault in 1905, amounting to $417,000,000, 27 per cent was in ore and its products, and 28 per cent in cereals; and, as will later be shown, more than 12,000,000 tons increase in freight carried in 1905 over 1904 was in coal, flour, wheat, grain other than wheat, manufactured and pig iron, salt, iron ore, lumber, and general merchandise. For convenience a sketch is pre-

sented herewith showing the present and contemplated encroachments, and showing in black the present Government improvements, and delineating the further developments which in the common opinion the Government will be fortunate to construct as rapidly as they will be required."

Government's Exhibit 89, Statistical Report of Lake Commerce at St. Marys Fall Canal, covering seasons of 1909 and 1910, received in evidence.

Mr. GOULDER (resuming his testimony). It has been the practice as I have observed to get out a report at the Sault Canal, for the reason that that is the only place on the Lakes where exact data can be got. The Government has tried very hard and we have tried very hard to get complete data; but there, on account of the necessity of every vessel stopping and spending a little time there, the
444 Government is able to have an office and is able to get the quantity of freight and the quantity of freight carried, and the name of ships, size of the ships, tonnage, freight rates, and everything of that kind, and the Government has always compiled—the office in charge has always compiled a wonderfully interesting and accurate and instructive lot of matter on that subject. Now, we use that, and this memorandum that I got up for Mr. Livingstone was merely a division of labor in which I gathered those things together out of just such material as you have in hand. This begins with the first noted—recorded tonnage there, 14,503 tons in 1855—and year by year goes through until 1905 with its tonnage of 44,270,640 tons.

"Confining ourselves to the American side, where we now have the single canal, with a restricted width at the bridge of 108 feet, the Weitzel Lock, and north of that the newer and larger Poe Lock, we find that of the enormous total of over forty-four and a quarter million tons of actual freight in 1905, 88 per cent passed through the American Canal and Lock and 12 per cent through the Canadian Lock, which was used to considerable extent by American vessels. The striking fact is the tremendous and progressive increase in the traffic. Taking intervals of ten years, the traffic of 1865 was twelve and a half times that of the first year. That of 1875 was four and a half times the traffic of 1865. At the end of another ten years it was almost four times the traffic of 1875." That would be 1885. In 1895 the traffic again was about four and one-half times that of ten years before. Although the great total of fifteen million tons of freight was carried through the Sault in 1895, the traffic of 1905 was almost three times as great.

Here some interesting comparisons may be made.

At the Suez Canal and in forecasting traffic through the Panama Canal net customhouse measurements of the ships is expressed. The net registered tonnage of ships passing in Suez in 1903 was approximately 11,000,000. Prof. Johnson, of the Isthmian Canal Commission, on careful study, estimated that if the canal there
445 be opened in 1914, then in 1924, after ten years of operation, a traffic of ten and a half millions might be reached, expressed in net registered tons.

So, taken by net customhouse measurement, the increase in the eight months' season of 1905 over 1904 through the American Canal and locks at the Sault was 10,961,191 registered tons, and in passing it may be said that the total movement thus measured was three times this amount.

Alfred Noble, one of the most distinguished engineers of this or any other country, stated in his address before the annual convention of the American Society of Civil Engineers in 1903, and very conservatively stated:

"The average freight rate on all classes of freight during 1902 was 0.89 mill per ton-mile, the average haul being 827.4 miles. If the freight had been carried by rail, the average rate could hardly have been less than three mills per ton-mile, and the average haul would have been about the same as by water. On this basis the saving in transportation by the water route during one year was nearly $63,000,000. This amount of saving on Lake Superior commerce alone, during a single year, is within $5,000,000 of the entire amount appropriated by the United States for all harbors and waterways on the lakes above Niagara Falls, from the formation of the Government; if the commerce between Lake Erie and Lake Michigan be included, the annual saving greatly exceeds the amount thus appropriated. Indeed, the saving during one year on a single article, iron ore, would repay all the money expended up to this time on the waterways and harbors which it traverses on its way from mine to furnace. Viewed in this way, no great investment was ever made by a corporation or government with such a magnificent showing of profit."

Alfred Noble is one of the foremost hydraulic engineers of this country—of the world. The most recent connection that I have known of his was with the Pennsylvania Company in connection with their improvements in New York as consulting engineer, and a man who was frequently at meetings, conventions, that had to do with these subjects.

446 Mr. Noble was over conservative in taking three mills for an average ton-mile cost for rail haulage. The International Waterways Commission, after recent investigation, adopted the estimate of four mills for 1905, in which year the ton-mile cost by lake was found at the Sault to be 0.85 of a mill, with the average haul increased to 833 miles, and so the commission in its reports estimates the saving for the year 1905 at $116,000,000. (Report May 3, 1906, p. 4.)

General Poe, in one of his later reports, said that he had been in touch with lake commerce for 35 years and had given up prophesying concerning increase, finding that the wildest expectations of one year became the sober realities of the next. The Poe Lock, 800 feet long and 100 feet wide, was designed to accommodate four of the largest ships expected ever to be employed on the Great Lakes. Now there are many of such size that but one can be accommodated in this lock. Many ships more than 500 feet in length and 55 feet

beam, some of 600 feet length and corresponding beam, are navigated; many such are under construction or contracted for, and I have it on good authority that one ship over 640 feet in length and of corresponding beam has been contracted for.

I don't think—Mr. Livingstone can tell you—I don't think that was carried out. I don't think that even up to now they have got. There is a contract out now for two ships, and again Mr. Livingstone will give you the specific facts much better than I. I think hey are 620 feet long and 64 feet beam, something like that.

Returning to the report of the International Waterways Commission, they say on page 4, that while in 1904 there were only 40 boats in the Lake Superior trade with a capacity of 8,000 tons or more, "32 additional vessels will be in commission during 1906, none of which will have the capacity of less than 8,000 tons. The combined aggregate capacity of these 32 new boats will be about 338,000 tons for a single trip, and they will constitute an addition of about 20 per cent to the carrying capacity of the fleet engaged in the transportation of ore from Lake Superior." Thus it appears that
447 the increase of 1906 must duplicate that of 1905, and we may again refer (Statistical Report, Sault operation for 1905, p. 3) to the fact that the increase of traffic was "in coal, flour, wheat, grain other than wheat, manufactured and pig iron, salt, iron ore, lumber, and general merchandise."

That this increase will be matched or exceeded in 1907 is the general impression. I take at random the following, which I read here in Washington, in the Cleveland Leader of June 7, the present week:

"The outlook for boat building on the Lakes this year is fully as bright as it was this time a year ago. The probabilities are that more boats will be built during the winter of 1906 and 1907 than have ever been built for a similar period on the Lakes. There is a statement to the effect that one company alone has seven shipbuilding orders in contemplation, the matter of contracts being only a matter of a short time. In addition, the other yards are known to have some business in anticipation, and it is believed that they, also, will be busy throughout the winter. The American Shipbuilding Company has at present eight boats under construction for 1907 delivery. In all of the construction, with the possible exception of one or two individual vessels, the boats will run over 550 feet in length, and it is now expected that before the year is over one vessel will be constructed close to 650 feet. Whatever may be the length, it is practically insured that of the present draft, all new boats will have a carrying capacity of at least 10,000 tons of iron ore and approximately the same amount of coal. If the times comes in the history of these boats that the channels are deepened in the Limekiln Crossing and in the Straits of Mackinac, these same vessels will be able to load to a depth that will permit them to carry from 12,000 to 14,000 tons of any bulk commodity. In a recent report to the Chief of Engineers at Washington Col. Kingman made the

statement that the condition was completely reversed on the Lakes, that harbors and channels have to be built to accommodate the boats, rather than boats built to accommodate the harbors, which was the condition 10 or 15 years ago."

Figures otherwise obtained indicate that more than 30 such
448 ships are already under contract or in contemplation, which upon the conservative allowance of 22 down cargoes and only two full up cargoes, each will carry 6,000,000 tons. We do not need the newspaper statement to convince those familiar with the trend of events that improvements in cargo handling facilities in the required attempt to reach up and keep pace with the development, will largely increase the carrying efficiency of the existing fleet. That the estimate increase of 1907 will probably justify General Poe's expression of the increase exceeding previous calculation is enforced by the fact that the ships referred to for 1907 delivery and use are building, some for parties have connection with production of ore and of coal, and others by those engaged exclusively in the carrying trade; and that it is a common practice in building these ships to pay the building price something more than half in cash and something less than one-half in bonds at five per cent, which are trusteed and taken and distributed by financial institutions. This furnishes the combined judgment of owners, shippers, and of conservative financial institutions, all closely in touch with the situation, that the commerce and traffic will require and develop in 1907 an increase which may exceed that of 1906, which will not be less than the increase of 1905 over the previous year to which attention has been called.

Holding these views and acting upon them, there seems to these people a clear corresponding necessity for the Government most jealously insisting upon control of the land and waters north of the present works at the Sault for exclusively navigation purposes, and so is justified the general feeling which views with distinct alarm such encroachments as are in progress by private interests. It is not too much to say that such men marvel, after all that has been said and seen upon the subject of the development and national requirements at the Sault, that the United States Government, great and broad and farseeing enough to build a canal at Panama which after ten years' operation may pass tonnage equivalent to the increase of a single current year at the Sault, permits in any manner
449 an isolated private interest for its own individual private gain, to encroach at this essential place upon land and water which in general opinion is already in large degree necessary and within a few years must be required for the broad national purpose of accommodating and facilitating this commerce.

The immediate condition—and this is what we were getting at—appropriation has been made and the Government is properly undertaking to widen the canal leading to the present two locks. All agree that this is a tardy improvement, which has for years been urged upon plain necessity. The present canal is inadequate for

the locks now in use. With large loaded vessels in the canal, currents dangerous alike to the ships and the Government improvements are created in the filling of the locks. Increasing size of ships only emphasizes the necessity, and nothing should be permitted or tolerated by the Government to retard the most speedy accomplishment of the work. Especially should it be begun and prosecuted if the improvement involves displacement of the north wall or bank of the canal and requires the use of the south pier during the improvement. But as best accomplished and without accident, this is but a step in the solution of the problem.

It has been claimed that the engineers have concluded that, the ships arriving with regularity, the Poe Lock would care for one-third more lockages than last year. The International Waterways Commission may again be quoted, after their investigation of conditions at the Saults (p. 5):

"It was supposed the Poe Lock would accommodate the commerce of Lake Superior for many years. But it, together with the Weitzel Lock and the Canadian Lock, has at times proved inadequate for the proper dispatch of the lake vessels passing the rapids, and in the near future further lockages facilities must be furnished to meet the demands of commerce."

Again, after adverting to the increased numbers and size of ships, the commission reported (p. 6):

"It is estimated that the present lockage system is capable
450 of giving what may be considered reasonably prompt service if not required to pass more than 50,000,000 tons during the season of navigation, but if called upon to pass more than 60,000,000 tons, delays, which are not infrequent now, will become excessive and cause great financial loss. In view of the past growth of this commerce it is extremely hazardous to predict its extent in the future, but a conservative estimate indicates that before another lock can be completed the limit of traffic for prompt service will have been passed."

Recurring to statistical report of Sault operations, 1905 (p. 19), the following appears:

The average time for lockage in the Weitzel is about two-thirds that in the Poe Lock. In the report there is designated both for 1904 and 1905 "necessary time" for passing through this canal, 1⅛ miles long, including the lockage. In 1904 the report shows an average time about 66 per cent more than the designated necessary time. In 1905 the designated necessary time was increased about 14 per cent; nevertheless the average time stated exceeded this by about 23 per cent. It is apparent that it is safe to regard actual performance necessarily more or less irregular. And in making this average there clearly must be individual hardship, since the report shows that a single ship has been locked through the Poe Lock in 11 minutes, while the average time given for such lockage is over 35 minutes.

Following out these figures a little further, the average time of lockage for the Weitzel and the Poe Locks, respectively, in 1904 was 22 minutes 43 seconds, and 34 minutes 30 seconds; and in 1905, 22 minutes 57 seconds, and 35 minutes 15 seconds. For those years the average time of passage through the canal, 1¾ miles long, including lockage, was, in 1904, 2 hours and 18 minutes, against the designated "necessary time" of 1 hour 23 minutes; and in 1905 actual time 2 hours 11 minutes, against the designated necessary time 1 hour 39 minutes. The report shows that in 1905 the Weitzel Lock put through 6,561 ships in 4,469 lockages; the larger Poe Lock put through 9,458 ships in 5,288 lockages.

451 The statistical report of Sault commerce already referred to shows, on page 12, a comparison between the years 1904 and 1905, showing in the latter year an increase of 34 per cent in the number of lockages, the same percentage in number of vessels passed, 50 per cent increase in net registered tonnage, 40 per cent increase in net tons of freight, and 44 per cent increase in passengers carried; these figures all based on the total traffic through the American and Canadian canal and locks.

Again quoting Alfred Noble in his address to the American Society of Civil Engineers in 1903:

"With a twelve months' season of navigation the triple lockage system at the St. Marys Falls Canal would pass 50,000,000 to 60,000,000 tons without serious delay in vessels of the present average tonnage. If the average tonnage were doubled, making it equal to that of ships now using the Suez Canal, the capacity would be considerably greater. The most sanguine promoter on an isthmian canal would not expect this total to be reached for a long time to come."

As our season is about eight months of the year, the estimate of Mr. Noble referring to the size of ships employed up to 1903, would therefore be, for the two American and one Canadian locks, an accommodation without serious delay for 34,000,000 to 40,000,000 tons of traffic. The Waterways Commission, as already quoted, taking the size of the ships up to the present year, adopted the figures of 50,000,000 to 60,000,000. Every business indication points to an excess over 50,000,000 for 1906, and, as already shown, preparations are under way for a similar further increase in 1907. At this point the statement will bear repetition that, by the Sault report, the increase of 1905 over the previous year was about 12,225,000 net tons of actual freight through the American and 440,000 net tons through the Canadian Canal. The estimates for a similar increase have been given from the estimates and report of the International Waterways Commission for the current season, and the newspaper quotations showing preparations for a corresponding increase for 1907 has been quoted in full.

452 It is impossible to forecast the future with satisfaction as to results, yet must it be said that such forecasts in past years have been exceeded. As purely illustrative, taking cycles of ten

years, an astounding curve of increase is presented. Figuring on this curve that I used, somewhat similar to this one that you handed me, 1907 would be 51,100,000 tons; 1908, 55,800,000 tons; 1909, 60,900,000 tons; 1910, 66,300,000 tons. The total in 1910, the largest in lake history, was 62,363,218 tons, the nearest being that of the season of 1907, when 58,217,214 tons were carried. I find that according to the curve which I made or used, 1910 should have had 66,500,000, and it would run up in 1925 to 202,000,000. The total actually in 1910, after the two lean years, was 62,363,218 tons, about four million short.

No man would have the temerity to predict this continuing increase and the enormous total of 200,000,000 tons in 1925, and we may dare go no further than say that the business conditions in sight indicate a larger traffic for 1907 than is shown in the foregoing table; while there are those who, not shutting their eyes to the chance of temporary haltings, yet believe that the development has but begun in earnest and greater things are to come in the future than we have experienced. Enough is shown in actual accomplishment to justify completely acceptance as a fact of the supreme importance of holding sacred for the Nation the navigation and everything requisite to the navigation of the Sault Ste. Marie. While we may not make exaggerated predictions and may even hesitate in projecting the rate of increase in the future, what man is so bold as to attempt to fix a limit on this traffic?

The remedy:

It is for the United States Government to begin at once and vigorously prosecute the widening of the canal, for which the money was appropriated in 1902 and is at present available.

Every day experience shows a real necessity for this improvement to accommodate the two present locks. Dangerous currents are created, delays are involved in the operation of our canal and
453 locks even now for want of adequate approach, growing more and more inadequate with the increase in the size of ships and in the volume of traffic.

The consensus of opinion is that, expedited as it may be, a third lock can not be constructed so soon as there will be pressing need for it; and serious delays are bound to occur with the present facilities, as we may judge by experience in the actual practical operation and transmission of traffic by all of the existing facilities at the Sault, aided, as these will be, materially by increase of the present canal approach.

The time consumed in building the Weitzel Lock was eleven years, of the Poe Lock nine or ten years, and the Canadian Lock about eight years, as shown by Government report. To take out of commission the Weitzel Lock and deprive the traffic of its use while there is building on or partially on its site a new lock is a proposition which can not and will not receive the approval of the vast interests dependent upon navigation through the Sault, even though the brightest hope of a three years' construction might be realized.

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In the face of the facts shown the dependent interests (and these are national in their range and character) justly claim that there will be required a series of locks to the northward of the present lock to accommodate the so rapidly increasing traffic. It will hardly be claimed that one canal could, in this character of navigation, afford reasonable approach to more than two locks. To properly utilize those locks north of the Poe Lock, which will require to be constructed, it will be appropriate to have one or more canals, according to the progression of the traffic to the northward of the present canal as the same shall be widened.

The experience in respect of currents which we are undergoing daily indicates also the wisdom of an independent means of filling the locks without drawing the water through the approach canals; and it is not questioned that this may be done by building a suitable dam at the appropriate point out across the rapids, so making a forebay from which the locks, in any number, may be filled through tunnels or other equivalent means.

454 In order to accomplish what so plainly is necessary, looking to the present and the immediate and assured future as well as to the hope of the more distant future, the National Government, for the protection of this national necessity, should have and keep control of the land and water and the land under water out to the international boundary line, and that it join with our neighbor, so far as necessary, to the mutual interest in preserving the national advantages which nature has furnished at this point—the supreme point of this character in this country, if not, as already has been claimed, in the world.

The history of revocable licenses has shown difficulty in the disturbing of rights under which have developed fixed structures and local dependence of business and other interests. The history of such matters exemplifies the truism that "an ounce of prevention is worth a pound of cure." These waters and the land under them, as certainly as anything can be in business, are increasingly necessary to the United States. Complications can not arise from the use of such international boundary waters for purposes of navigation by great commercial canals and locks, free to our neighbor as hers are and will be to us; and an international commission exists and may be continued capable of dealing with such a subject without friction. The development of the Northwest has come from and its future, in great measure, depends upon the unrestricted navigation of these waters. Our industrial supremacy has been built up and clearly depends upon the unrestricted navigation and the aid of the facilities at the Sault. Yet, as before shown, the value of the iron ore and products of iron represented by 27 per cent and the cereals represented 28 per cent and general manufactures and commodities represented 45 per cent in value of $417,000,000 of traffic through the Sault in the single year 1905. Therefore, to permit private business enterprise of any kind to get in the way and interfere with this traffic and its necessities is something which the Lake Carriers' Association,

and, after its investigation, the International Waterways Commission, in common with all concerned, directly or indirectly, in the great dependent industries of this country, whether as
455 owner or operator or workman concerned in mines, wheat fields, furnaces, and every variety of human endeavor, may most justly view with the alarm which has been expressed and may call upon the Government to prevent.

The admonitions of more than sixty years, the warnings through that time, the effort as long ago as 1822 by the military officers of the United States to reserve this property, have been only in part followed, but in the belief of the Interior Department and the opinion of the Department of Justice they have been sufficiently followed to establish and protect the public rights.

The courts have been appeal to, and this is doubtless a proper subject for congressional action; if through any slip private rights have been acquired, congressional action may be necessary to acquire and compensate for these rights. For the present the licenses which have been granted are revocable, and can be revoked at any time by the same authority which granted them, and efficaciously revoked, and all work under Government permission stopped. The Government can be expected, of course, to care for its rights so far as they depend on claims of ownership and legal rights of persons. In the history of these encroachments it appears as if one revocable license after its granting was surrendered in consideration of a broader license, and now there is strangely depending a quitclaim deed to the Government, for the consideration of $1, of a part of this property which the Government claims to own, and which claim the Attorney General is seeking to enforce in the litigation now pending, and which might even work an estoppel against the Government by its own act in accepting.

Nothing should be permitted to delay the work at the Sault, first of widening the present canal, for which money was appropriated on representations of the commercial interest which were so conservative that they have in every respect already been exceeded. The official statement of operations at the Sault, coupled with the reported results of investigations by an international commis-
456 sion, appeal eloquently for the complete reservation of the lands and the waters and the land under the waters north of the present locks and canal; and they appeal with equal eloquence for the most rapid possible increase by canal and lock of the present facilities in the face of official and expert opinion, based on investigation, that these improvements will not be able to keep pace with the requirements of the traffic; while to the people generally of this country a saving of $116,000,000 in 1905, increasing some 20 per cent a year, stamps the situation at the Sault as one which, in the general interest, may not be made the opportunity of narrow private gain.

This statement expresses my present opinion as to the navigation interests at the Sault. I have so stated in public addresses and in committees of Congress.

On cross-examination:

COUNSEL FOR DEFENDANTS. We would like to read into the record that portion which was omitted of Mr. Goulder's statement, on page 262:

"September 4, 1902, the Commissioner of the General Land Office reported to the Secretary of the Interior that the question of ownership of Islands Nos. 1 and 2, lying north of the United States Ship Canal, 'is a judicial rather than an executive one, and should be determined by the proper court.'

"January 21, 1903, the Secretary of the Interior, in asking the Attorney General to bring suit to establish the title to Islands Nos. 1 and 2, said: 'It is to the interest of the Government that it should be adjudged that the title to such islands does not pass from the United States by grant of the shore lands.'

"About February 1, 1903, Hon. Willis Van Devanter, then Assistant Attorney General for the Department of the Interior, now United States circuit judge, advised the Department of Justice that the object of the then proposed suit, which is now pending in the United States Circuit Court of Appeals for the Sixth Circuit, involving said Islands Nos. 1 and 2, is 'to enable the Government to preserve them,
so that it may not have to deal with private owners in such
457 further improvements as it may make to meet the necessities
of commerce. Twenty-five years from now the subject matter of this suit will be of incalculable value to the Government.'"

WILLIAM LIVINGSTONE, a witness called by the Government, being duly sworn, testified as follows:

I reside in Detroit, and am president of the Lake Carriers' Association, and have been associated with that organization for 30 years or more. I have been interested in navigation on the Great Lakes during that time; most all of the time have been a vessel owner. I have sailed a good deal, have a pilot's certificate, but never sailed a vessel really. I am acquainted with the navigation interests upon the Great Lakes, and have given some study to the subjects that are appurtenant to their welfare and necessity. I am familiar with the physical location of the Sault Ste. Marie, and have made a study of the developments in the freight and passengers carried on the Great Lakes during this time, and am also familiar with developments in marine architecture. I have formed an opinion as to whether it is necessary for the United States to have absolute control of property and river north of the present St. Mary's Falls Ship Canal out to the international boundary in the interests of navigation. My opinion is that the United States Government should absolutely control St. Mary's River for navigation purposes to the international boundary line.

COUNSEL FOR THE GOVERNMENT. What is meant is absolute control and possession, with nobody else in the way to interfere in any manner or form?

The WITNESS. Our reasons for so stating, as president of the Lake Carriers' Association, of course, I represent their views, and our

reasons for so stating and passing a resolution to that effect, all the reasons practically are stated in this hearing before the Rivers and Harbors Committee, a copy of which you have, 60th Congress, first session.

The facts of the matter perhaps condensed as briefly as possible, to put it fairly, at least to make a fair statement, were these:

458 We wanted certain improvements in the interests of navigation at the Sault Ste. Marie Canal, and we found that we were confronted there by the proposition that certain power companies had obtained certain rights, or at least had possession to this extent, that they had been granted by the Government certain permission on what is called revocable permits to occupy the river, and the result was that when we wanted improvements there which were absolutely necessary and for which there was a crying need in the interests of navigation and applied to the Government for it, and the Government, in the due course of law and acts that were passed, appropriations made, started to make these improvements, they were confronted by the power companies claiming that they had certain vested rights and that until these rights were adjusted it would be impossible for the improvements to be made. It resulted in long and vexatious delays. For instance—I cite one or two instances so as to briefly explain what I am trying to get at in the shortest possible space of time—for instance, we got an appropriation for the widening of the canal above the Poe Lock in the St. Mary's River at the Sault. The width was 100 feet; we wanted it widened to 108 feet more, making 208 feet. The work was started—Col. Davis was then the engineer, United States engineer, in charge of that district—and after he had progressed with a portion of the work suits were commenced or papers filed in some way, a legal way, by which the work was stopped, and the result was that that work was held up for about approximately, we will say, three years, notwithstanding the fact that Congress had appropriated the money for the work, a portion of the work had been done, and the money laid in the Treasury all that time for the completion of the work. The Michigan Lake Superior Power Company made certain claims in connection with the matter, and the Chandler-Dunbar people also made certain claims in connection with it. In that case I don't think the Chandler-Dunbar people were nearly so much to blame by any means as the Michigan Lake Superior Power Company; but the result was, anyway, regardless of what the difficulties were, or the right or the wrong of the legal contention, the result was that that canal was held up, as it were, by the throat for a period of about

459 three years before work was commenced.

Again, we succeeded in getting a bill through Congress for the building of a new lock in the rapids, or in the river. The appropriation, if my memory serves me right, was about $6,250,000, or approximately that; and immediately we had difficulties again and delays on account of the claims of the power companies. You clearly understand in making this statement that I do not pass upon

the question in any way or attempt to pass upon the question as to the rights of the power companies, as to whether their contention is right or wrong; but it resulted in a long delay in arranging matters so that work could be resumed, and Col. Townsend had then succeeded Gen. Davis, who had retired on account of age limit, and we had a long delay there. The result of this controversy, extending over a period of years, was that, in 1906, although we had been agitating the question for some time, our Lake Carriers' Association at their annual meeting in January, 1906, I think—the documents here would refer to it—passed the resolution read by Mr. Coulder, asking the Government to take charge of the St. Marys River and to clear out all obstructions there of every kind, name, and nature, or, at all events, if not cleared out, to put the matter in such shape that they would have absolute control of the river, so that no private interests, in case that the Government deemed it necessary to make any kind of an improvement there—that there would be no private interests in the way that could say nay or interfere with it in any way. That became a bill, which you are aware, as an act of Congress; we supposed at that time that that absolutely settled the matter; but it would seem from the present condition of affairs that it did not. The question as to how they were to settle with private individuals, you will clearly understand, the Lake Carriers' Association had nothing whatever to do with; but I have spoken of these two particular instances for this reason, to show the reasons why we arrived at that conclusion, and the fact that with the great growth and increase of the tonnage of the Lakes, which has been growing by leaps and bounds—as a matter of fact it has grown so rapidly that the
460 dream of today has been almost the reality of tomorrow—that to avoid repetition of all of these things in the future, we took the course that we did. We believed that the only safe way—we believed, first, that the interests of navigation should be paramount to all other interests; that was, we believed in law an undisputed fact, and that the only way to accomplish the purposes that we were seeking for—to have improvements made when necessary without unnecessary contention and delay—was for the United States Government to have absolute control. Believing that was so, taking the experience we had had in the past on account of these delays, it only intensified our belief in that matter, and hence we have taken the position that we have. There are a great many things in addition that could be said in connection with it; but this will illustrate the reasons why we came to that conclusion, and with the many things that have occurred in the years gone by, each succeeding year has only emphasized in our minds, at least, the belief that that is the only proper solution of the matter. It is absolutely our belief that the Government should have that complete control from the shore to the boundary.

My attention is called to the report, annual report, of the Lake Carriers' Association for 1910, on pages 116 and 177, with reference to the expansion of trade and appurtenant subjects relating to the

situation at the Sault. That book is my annual report for 1910 of the Lake Carriers' Association. I think it is fair that I should have added before closing the statement I have made last that these delays—I thing I shoud have added that, in fairness—that these delays have cost the navigation interests of the Lakes and the public at large a very large amount of money. It is rather difficult to make an estimate as to what has been the damage to the public by reason of obstructions to the free hand of the Government in improving the navigation facilities at the Sault; it is rather difficult, because there are so many factors that come into the question, into the equation, I should say, but it does not take but a very short time. In the first place, we didn't have the facilities that we should have;
461 it was imposible to take—it will be before—I will try and put it still more brief—perhaps in trying to make it brief I am overdoing it; there are a good many questions involved in it; for instance, the public are very largely interested in the matter, in addition to the vessel men—the question of delay; not being able to accommodate the tonnage is a very large factor. In my annual report of 1907, pages 32 and 33, this is in a report of the International Waterways Commission, in which they quoted this, in addition some figures of their own. It says: "My Livingstone's annual report, 1907, pages 32 and '3, comments on this conservative estimate, and from facts stated by him says that a difference of six inches in levels means a difference of two and a half million dollars per annum to vessel interests, and is equivalent to paying four per cent on an investment of $64,332,000." That may seem for a moment just a little irrelevant to the question, but it does not come into the general question as to delays. We had been building a good many boats of very much larger class than heretofore; for instance, from, I think, 1890 the average load up to the present time, the average load of vessels, had increased from about 1,800 tons to about 8,300 tons, speaking of the average. Say 20 years ago a boat—I am speaking approximately now—of 3,000 tons, when a 3,000-ton boat was first launched, two of them which I happened personally to be interested in, both of them, they were then the largest vessels on the lake, carrying 3,000 tons of ore. Now we have vessels on the lake that have carried something over 12, yes, nearly 13,000, gross tons of ore. That was carried, however, not through the Sault Canal, but was carried from Escanaba to South Chicago; they couldn't have loaded at that depth going through. And we now have a couple of boats, for instance, speaking of the great growth of the tonnage, about three weeks ago, within three weeks, not to exceed that, two boats have been contracted for for the Shenango Furnace Company, whose interests are controlled in Pittsburg, and fleet on the Lakes, with vessels 617 feet in length and 64 feet beam. I am speaking of this, leading up to this fact, these locks and all this delay that has occurred, which
462 has held us back for quite a long time. Take the new lock under process of construction. Owing to the delays, the Government engineer informs me that it takes about five years to con-

struct a lock of that kind, and the result is that we will be so congested, and are already so congested for lack of facilities, that the loss entailed on the vessel interests is very great, in addition to the loss to the great general public.

There never has been a time when the Government in its work in affording facilities for the passage of boats at the Sault has been abreast of the times, because, as a matter of fact, usually the question has come up when the emergency was passing. In other words, the growth has been so great and so rapid that conditions have confronted us much more quickly than we thought so, and allowance was not made for the great length of time which it takes to build one of these projects, after it has been threshed out and bill passed, appropriation made, and the length of time consumed in building. In addition to that, I call your attention to the fact, merely illustrating the great growth and how great the loss is both to navigation interests and the public, take, for instasce, the Canadian Lock; perhaps 20 years ago that was completed. At that time when it was built it was 60 feet in width and 900 feet long, that is the Canadian Lock, the Canadian Sault. The Canadian engineers and the Canadian Government at that time, after it was built, and acting in entire good faith, had some reasons to believe—they thought and stated at the time that they would be abundantly large enough for the next fifty years to come, if not for a century; and the result is that four years ago, I think four, possibly three, three or four years ago, anyway, we began to build a size of boats 60-foot beam, that couldn't go through the canal, utterly useless for that purpose; the same as the Poe Lock; when Gen. Poe constructed that lock he intended that four vessels should be locked through, it would be abundantly large enough for four vessels for a long time to come. The result is now, and has been so for several years, that but one of our large vessels could be locked through that lock. I am merely speaking of these things as illustrating
463 the great growth and rapidity of the tonnage of the Lakes, and the great loss that has accrued on account of these long delays. I know of instances in which vessels have been stuck on the sills of the Poe and the Weitzel lock because their locks were not deep enough, but it was due to no fault of the engineers, because the depth on these locks was given out daily, and our vessel owners are not all saints; the result is sometimes a man wants to get a little more cargo and load a little deeper than he ought to; the result is if he loads to more water than there is in the lock, why, he isn't going to get through. The depth of the locks there does not control the extent of depth that can be used in marine architecture, because you could build a boat, been built as lots of boats are built on the Lakes for the future—I will explain it in this way; there are two points to that. The depth of the Poe Lock—I mean to say of the locks at the Sault, the depth of these locks that a boat can safely pass over—absolutely regulates the depth of water, the amount of tonnage which a boat can draw, the depth of water for instance which she can go through. That answers that question. Second, your other question was about

its controlling, building a boat as to the size, we already have a large number of boats on the lakes that are built for the future, not for the present depth of either the Canadian Lock or the American Lock, but are built with reference to the lock which is now building; for instance, the new lock, lock which will be 1,350 in length and either 80 or 85 feet in width, I am not quite sure. That lock on ordinary water it is expected will allow a boat to pass through, I think 24 or 24½ feet of water, say 24 feet, so that it is expected that that lock will be completed in, say, three and a half years. Perhaps Col. Townsend can tell you more definite than I can about that. And so that all the boats, the new boats that have been building for several years, are built not with present conditions, but with a view to future.

Q. How much difference does it make as an economical proposition in being able to take one of the vessels through the locks that is loaded to the extent of just one inch heavier?

464 A. You take a boat drawing—you take one of our 600-footers, I will use that, for that is one of the large class, we figured it over a number of times, and we estimate that when she has her bearings, and loaded say to any depth, after she has two-thirds of her capacity or more, that it will average say about 160 tons to the inch, perhaps 165, that is, approximately, not absolutely accurately, but our experience has shown that to be about correct. I might say right there we have had very strong illustration of that this past year from the fact that all through this last year 1910 there was about eight inches more water in the Canadian Lock than there was in the Poe Lock, the American Lock, and that is evidenced by the fact that the result was that for the first time in the history of these locks the Canadian Lock carried much more tonnage through it than the American Lock, due to the fact that as a general proposition all during the season they could load about eight inches more going through the Canadian Lock, through the Sault, which enabled them to carry, we will say, roughly speaking, depending on the size of the boat, but a large boat say 1,200 tons of cargo.

It is of the utmost importance of course that every boat—it is of paramount importance that every boat should have dispatch, because the question of dispatch really makes the difference between loss and gain to a very large extent. If you are one day longer making the trip, for instance, you are delayed, you are 24 hours longer, you have got to add another day's expense, you have got the wages of your crew, the use of your boat and all that sort of thing, but on the other hand you have got to take this into consideration, you have got to take into consideration the fact that boats get bunched sometimes as we call it.

Q. That is what I was ultimately coming to. Explain the situation there with reference to lockage facilities when there is a bunch of boats trying to get through, on account of fogs or accidents.

A. Well, the result of that is simply this, that when boats get bunched from any cause, sometimes from fog and sometimes it is owing to the fact that too many boats are sent to one particular

465 dock, that is, more than the facilities of the dock, and there is delay in unloading, or there may be fogs which held a lot of them up, there may be stress of heavy weather, particularly in the fall of the year, and the result is that when these boats come down to the Lakes they have got to take their turns, the lock is kept going constantly night and day, you understand, and they are put through as quickly as they possibly can. Now, there is a condition of affairs that the owner of the boat nor the master of the boat have no right to complain of, have no right to make complaint in connection therewith. Why? Because these are circumstances beyond the control of the engineers handling the locks, or any one else's control, but if for instance there were delays at the lock, the physical reasons were such that it was simply a question of promptness, in executive ability in getting them through without delay, then that would be entirely a different proposition. You have got to take all of these elements, you have got to be reasonable, you know, in all of these propositions; but to show you for instance how important dispatch is, I think if you will pardon me a moment, now for instance I just made a memorandum, to show how absolutely necessary, laying aside the circumstances which were beyond anyone's control which are incident to all business, a strike on the docks, fog or bad weather, anything of that kind; on the other hand, when these conditions don't exist, it is of vital importance that there should be just as little delay as possible. Now, for instance, one of our boats, the "Corey," she loaded 10,111 tons of ore chutes in 39 minutes, and the "Cole"—the "Thomas Cole," another large boat, these are both 600 footers, the "Corey" is not quite 600 feet—she unloaded 11,131 tons of ore in four hours and 30 minutes. These two records that I have given you are the record up to the present time, so that you can see in a comparatively few years ago, not so many years ago, you take 11,000 tons of ore, it would have taken several days to unload that, but we have been constantly increasing our loading and unloading facilities, until we lead the record of the Lakes in loading and unloading. That load that I spoke of unloading over there was unloaded by
466 four unit hoists, as we call them, and they averaged over 2,500 tons an hour, etc. Now, dispatch, you can see, is the very essence, it tons an hour, etc. Now, dispatch, you can see, is the essence, it is the vatality of whether you make or whether you lose. A delay or two to these big vessels is very, very serious. On the other hand, if there should be a break in the canal, had to be repaired, that would be unavoidable.

Q. I call your attention now to those pages in the report that I just handed you, this book: did you compile it?

A. Yes, sir; largely.

Q. I would ask you to read on pages 116 and 117, where it is marked on the margins.

A. "In the general prosperity of the country, cheap transportation on the Lakes has been a factor of prime importance. It is, in fact, responsible for the supremacy of the United States as an iron

and steel making country. Were the waters of the Lakes dried up, no railroad or system of railroads could hope for a moment to handle its traffic. It would simply cease to exist. The great iron and steel plants of Ohio, Pennsylvania, and the Central West would close, and thousands of allied industries would be abandoned. Three-quarters of all the ore used in the furnaces of the United States comes from the Lake Superior country. These deposits are one thousand miles away from the coke and limestone. Were it not for these Lakes there would be no possible means of assembling the ore, the coke, and the limestone to equal the furnace cost of those countries where the ore and coal lie in contiguous hills. No railway in the United States is better equipped to move freight than the Lake Shore, because its grades are light and its roadbed unsurpassed, yet the rate per ton-mile for moving freight on this railroad during 1909 was 5.16 mills. The rate per ton-mile of moving freight on the Great Lakes during 1909 was .78 of a mill." In other words, a fraction of seven-tenths of a cent per ton per mile, a ton of ore is moved a thousand miles on the Great Lakes for seven-tenths of a mill per mile. "A ton of ore is carried from Duluth to Buffalo at a rate but little in excess of the ordinary railroad switching charge in any of the large cities.
467 The wonder of Lake transportation is the suddenness of it, since it is but little more than half a century old, and its beginnings are well within the memory of men still living. Scarcely more than fifty years ago all the commerce of Lake Superior as well as all the ships that carried that commerce, could be safely stowed in the hold of any one of the vessels now engaged in that trade; and yet there are so many vessels now employed in that trade that over a waterway of 1,000 miles one vessel is rarely out of sight of another.

"The Government is now engaged upon the construction of a third lock at the Sault, to be 1,350 feet long and 80 feet wide, while preliminary steps are now under way for another lock. It is predicted that in the course of time a large portion of the rapids will be occupied by locks, and the time may be much shorter than expected, so rapid has been the expansion of our Lake trade. No plans have overreached it; on the contrary, all have fallen far short in the works created to care for it."

Q. Now, will you state as to your opinion from the results of experience, if it is necessary, in view of the past and in careful consideration for future interests of the Government, for them to have the title and the possession of the entire river to the international boundary?

A. Why, most assuredly we do. Possibly I ought to say this, though, so as to make the matter perfectly clear—on account of the judge I didn't want to take up any more time—it is difficult sometimes to answer a question without making some explanation regarding it; I would like to make this explanation in connection with that, and that is this: That it is impossible for any man living to tell just what the maximum may be of the tonnage on the Lakes. If we are to judge computed by the past, why, it would be simply

enormous. But there is a question involved in that which doesn't altogether appear on the surface, and is one of the factors why we take that stand, and that is this: It may be, for instance, that the time will never arrive when it is necessary to occupy the whole of the waters between the shore and the boundary line to the in-
468 ternational waterway line, although we certainly believe that it will closely approximate it, but that is a question that the future will determine; but this is the other point involved, and one factor, a strong factor, which has induced us to take this position, is that with the experience of the past, regardless of how much capacity we may want in the future, that we want the Government to have absolute control of it, unconditionally, so that if any work is projected in the future in the shape of another lock, or two locks or more locks, and we want more room; we want to have it in the power and interfere in any possible way; that the Government will absolutely dominate it, will absolutely have the power, and we have paid for our experience in the past—I put it that way—it has cost not only in the interest of lake navigation, the delays, an enormous amount of money, but it has cost the general public. For instance, Colonel Potter, in making some estimates on Lake Superior just four or five years ago, he estimated at that time that the saving in freights by lake transportation over rail had amounted to within five millions of dollars, for instance, of all the money that had been expended on the Great Lakes. The first appropriation made on the Great Lakes above the Niagara River was in 1820. You take it last year, in 1910, and the figures if figured out would show—approximately would show—that the saving on freights to the general public by the tonnage on the Lakes—lake navigation—amounted to more than the entire amount of money appropriated by the United States Government since the first appropriation in 1820, with quite a number of million dollars to spare. That, you understand, is in one year. So that you can readily see how great the loss is, not only to navigation, but to the whole United States public, the citizens of the United States. So that, involved with the question as to how much capacity we may want in the future, comes the question that whenever the necessity arises that we want more facilities, we want more locks, and we want more room; we want to have it in the power of the Government to have absolute control, so that no private interests of any kind, name, or nature can come up and interpose objections or raise legal or any other kind of objections.
469 We feel that in the hands of the United States Government, having control, that the navigation interests and the general public are absolutely protected, and it is the only place they can be absolutely protected.

Q. How does the necessity for that control appear, looking at it from the phase of controlling the levels of the Lakes?

A. Absolutely the same question arises there. These questions are up now before the International Waterways Commission. I just stated a little while ago that the difference of an inch in the levels of the water on our larger boats would average about 160 tons to

the inch. That is approximately correct. I don't give it to you in positive figures.

Q. Does that necessity as to increased lockage as things are now appear at all, from the standpoint of possible accidents which experience has shown required more lockage?

A. I will answer that in this way: We are in a very delicate position at the present time; we not only want this new lock which Col. Townsend is building at the present time, but we want another lock immediately. We ought to have two more locks at the present time; because you take the Weitzel lock, for instance, only the smallest class of boats can use that; it is used entirely, you understand, now by small boats and lighthouse boats—of course none of our large sized boats can use is—and the Poe lock already for our modern class of vessels—and the other type are fast becoming obsolete—is already altogether too small on account of the depth. It is all right for width, but not for depth. For instance, it is 100 feet wide and 800 feet long, but about the—and 20 feet is about—take the water which we have had this year. Of course, water varies more or less on the Lakes sometimes; for instance, the water is lower at the present time, this January, I think—Col. Townsend can correct me on that if I am not right, or Mr. Sabin—the water, the level of the water, is lower this January than any record we have ever had; so that these questions of course come in. What I am getting at is this, to digress
470 from that for a moment, the Poe Lock, the only two locks we have got now to depend on is the Poe Lock and the Canadian Lock; well, the Canadian Lock, on account of extra depth, carried about eight inches more water last year, in 1910, but we have many boats that it can not lock through simply because it is too shallow, 60 feet in width, so that those boats are shut out entirely from the Canadian Lock. That is point one. Point two is that neither of these locks have the depth that we ought to have for our modern boats that we have been building for the last few years back, in anticipation of the future. Now, if an accident occurs to the Canadian Lock, as did occur a year ago, for instance, that throws the entire tonnage on to the American Lock, the one lock, the Poe Lock, and the result is that that makes great delay; it makes a great loss to vessel owners and a great loss to the public. It doesn't take but a short delay to run up into the hundreds of thousands of dollars and into the millions, depending on the length of time in which the lock is closed. The Canadian Lock was out of commission a year ago, on account of one of the gates being carried away; the American Lock was also out of commission.

Q. Isn't there a reference to your report there to an accident to the Poe Lock that put it out of commission for sometime this last year?

A. Yes, sir. On June 9th—this is 1909—"At 2 p. m., on June 9th, while the 'Assiniboia' was tied up in the lower end of the lock, and the 'Crescent City' entering from the upper end"——

Q. This is the Canadian Lock?

A. This is the Canadian Lock; yes, sir. This lock was closed on account of a "break" from 2 p. m., June 9th, to 7.20 p. m., on June 21st. The lock was closed practically 12 days; it was out of commission for 12 days. That was the first time. The second time it was closed on account of an accident from 10 p. m., on September 23rd, to 3 p. m., on September 24th, to repair auxiliary gates; and from 7.45 to 8.10 p. m., on October 26th to step a new pair of lower main gates. The last delay was but slight; the first one was
471 about 36 hours. It occurred by the "Crescent City" entering from the upper end; the "Perry G. Walker" entered the lower approach and tried to make a landing at the north pier, but as the engines failed to reverse in time she collided with the south lower main gate, forcing it back and allowing the north gate to fall over, the south gate following. The swing dam was immediately put in operation. There is a lot of details here, but the result was that at that time it was out of commission about 13 days, approximately speaking; the other time 36 hours.

Q. Isn't there also a reference in that report to an accident putting the Poe Lock out of commission?

A. Yes, sir. The two occasions on which the Poe Lock was out of commission, once for three days from July 7th to 9th, and for eight days on November 10th to 17th, traffic was forced to pass for the most part through the Canadian Lock. I want to say in that connection now that when the American Lock is out of commission, that we have quite a number of vessels now that the Canadian Lock is utterly useless so far as navigation purposes are concerned. For instance, 60-foot boats, 60-feet beam, cannot go through the Canadian Lock at all, so that they are practically put out of commission until such time as the Poe Lock, the American Lock, is opened; so that if, for instance, either bound-up or bound-down, and the American Lock was out of commission, all boats of 60 feet beam would just simply have to go out of commission and lay to until such time as the American Lock was repaired.

Q. What month in the navigation season is the heaviest traffic passing?

A. Well, it varies somewhat; I could give you if you care for it——

Q. Just approximately. July, August?

A. On account of the weather we frequently make the heaviest records in July and August, on account of the weather.

Q. Take the months, for instance, now, of August, if the Poe Lock and the Canadian Lock were both out of commission on account of just such accidents as have been described there, what would be the damage to the public on account of delays?

472 A. You mean both the Poe and the Canadian Lock?

Q. Yes.

A. That would be dependent entirely on the length of time that they were out of commission.

Q. The same time that those delays occur?

A. Oh, it would run into the millions; without figuring or estimating, I couldn't. If it was out any such length of time—if both locks were out of commission, the whole tonnage of Lakes was tied up for that length of time—it would run into very large figures in a very short space of time. You can judge something of that for this reason. You can take, for instance, the traffic that passes up and down the Detroit River, and of which 80%, for instance, of that tonnage—approximately 80%—comes from Lake Superior or goes to Lake Superior. We have a record at the Limekiln Crossing, we have our own men there, we have two stations there, which give us the water signals in part. I make it a part of the duties of these men to keep a record of the vessels which pass up and down. The average season, the average duration of navigation, is about 240 days. Last year it was 235, a little shorter, dependent a little on the opening in the spring and the closing in the fall; that is, ice conditions; and the result was that last year, taking approximately the 75 millions as a basis of freight that went through the Detroit River, it resulted in approximately about 219 tons of freight passing through the Detroit River, an average of—yes, of moving—just a second. Yes. The result was that last year, in 1910, in the 235 days of navigation, there was an average of 219 tons of freight passed through the river every minute of the 24 hours of the day, for the entire 235 days; and I can give you the exact number of vessels that passed, and it was an average of a vessel passing every thirteen and a half minutes, a little less than every thirteen and a half minutes; it gives you some idea of the enormous traffic, if you tied up all that traffic, how rapidly it would mount into very large figures. I can give you the exact number of vessels. I have it here if you want it.

473 The COURT. Is it possible for a man familiar with the situation as you are to make any statement or estimate which can be regarded as an outside one, regarding the amount of tonnage which may pass through the Sault—that may in the future; for example, as I have the figures in mind, this last year, there were 60 or 70 millions tons?

A. There were 62 millions, a little over 62 millions of tons, net tons; that is, two thousand pounds.

The COURT. Two hundred million tons or five hundred million tons, can any such figure be taken as an outside estimate of what any reasonable man can think may be possible in the future?

A. I can only reply to that, Judge, by saying you could estimate it. I for instance might have very strong views as to what the commerce might grow to. Other men of experience might differ radically on that. The fact of the matter is, the tonnage of the Lakes has grown so by leaps and bounds the last 10 or 15 years or more it would almost seem that it was impossible to grow in the same ratio for the future; and yet that is largely a matter of—that is a matter of judgment, largely; I could make an estimate, I could make an estimate so far as that is concerned.

The COURT. With your knowledge and with your experience and your own views, what estimate would you make as to the reasonable maximum to be reasonably anticipated?

A. Just merely as an estimate?

The COURT. Oh, as an estimate, certainly. It is necessarily only that.

A. Well, if I were sure—pardon me—may I just half explain my answer?

The COURT. Certainly.

A. If I were sure of one thing I could make a much more accurate estimate, and that is this. The question of the sources of iron ore still in reserve—I attended, for instance, that Congress called, by President Roosevelt, was a member of it, about three years ago, in the White House, and others, in which there was such—for instance—some coal experts in estimating the amount of coal—

474 I should say ore, which is left in Lake Superior, some of them estimated, the experts, that that ore would be exhausted in between 40 and 50 years; and yet there were other equally good experts that after careful study of the question thought it would last for hundreds of years. There is a pretty wide difference of opinion. It is merely an opinion. My own opinion is that it will last for a very long time to come, because on account of scientific methods, etc., they are constantly getting so that they can use lower grades of ore, that formerly was considered of not much consequence, and notwithstanding all the predictions to the contrary they are constantly discovering new beds of ore. After making that explanation, believing—my belief at least—that it will last for a long time to come, I think it is possible it might reach 200,000,000.

The COURT. You would hardly think, so far as your judgment goes, that a man would be justified in forming and acting upon a conclusion on the theory that there was any appreciable probability that it would ever exceed two hundred millions?

A. I am merely giving you my opinion, based on all the facts that I have, and what limited knowledge I have. I must confess, Judge, that the older I get the more I find out the less I know.

The COURT. It is an opinion, of course, it must be; I was only asking for your own judgment, as to whether or not two hundred millions would be about as great a maximum as any man could reasonably think of.

A. I am merely giving that as an estimate. There is one thing, of course, which makes a man very careful and makes him hesitate about expressing a positive opinion, is the fact that men of the greatest experience—take our Government engineers, United States engineers, with my experience with them in the years gone by I think the equal of any engineers in the world, and I think they are not biased, you know, one way or the other, nothing to—it is straight, legitimate business with them from start to finish, and they are dealing with facts—take General Poe, who is one of the best engineers we ever had in the service, and had long experience on the Lakes, he

told me and told others, publicly, said before he died, that he
475 had no conception of what the possibilities of the Great Lakes were; and it has been so right straight along up to the present time, and therefore I would hesitate, you know, fixing what the maximum might be; I am giving that as an approximate; I know I have been in the business 40 years and I am frank to say my judgment was good for nothing so far as the rapid growth was concerned.

There was no testimony introduced in the case to show any project having in view the construction of another international bridge across the St. Marys River at any point in the vicinity of these premises.

COUNSEL FOR THE GOVERNMENT. We now move to strike out all the testimony bearing upon the value of water power in the River St. Marys appurtenant to the property of the Chandler-Dunbar Water Power Company's land, for the reasons that the water power appurtenant to said land is not the private property of the said Chandler-Dunbar Water Power Co. as against the Government in this proceeding, the usufruct of the water and the subaqueous land is the public property of the Nation and no vested interest therein against the sovereign can be acquired by the riparian owner, for the further reason that, under art. 1, section 8 of the Constitution of the United States the amount of water and subaqueous land needed for navigation purposes is exclusively within the dominion and control of Congress, and Congress acting under such power and authority has determined in sec. 11 of the act in question that all of such subaqueous land and all of the waters of the St. Marys River are needed for navigation purposes, and such declaration is final and binding and is not subject to judicial review, being a legislative, not a judicial question.

THE COURT. The motion may be overruled for the reasons I have already stated: To which ruling the Government by its counsel did then and there except.

COUNSEL FOR THE GOVERNMENT. We make the same motion with reference to Island No. 5, and to the reasons already given we add, that the undisputed testimony shows that the water power appurtenant to Island No. 5 is not of any commercial value in and of itself.

THE COURT. This motion may be also overruled: To which ruling the Government did then and there except.

525 (The following pages, 198–257, inclusive, are out of order, and in the printing of this bill of exceptions should precede page 149.—DENISON, Circuit Judge.)

PROCEEDINGS OF DECEMBER 27, 1911.

The trial being this day resumed, the court announced his rulings upon the propositions of law which had been submitted by the various parties in the form of requests, and upon such announcement, the various parties excepted thereto. The court then further announced that all such rulings both by way of adopting and by way

of refusing the propositions presented by parties would be filed in the clerk's office in the form of conclusions of law and in the form of granting or refusing of written requests on such subject which had been presented by the parties during the trial and which requests would also be filed. And further, that the exceptions taken by the parties as above recited might also, if the parties desired, be reduced to writing and filed in the clerk's office.

Such rulings of law so announced together with the exceptions of the parties thereto and as also filed in the clerk's office were as follows:

The COURT. The 1st request of the petitioner, "That the Saint Marys River is a public navigable river of the United States continuously from Lake Superior to Lake Huron, is a part of the Great Lake system as a connecting waterway, and the waters thereof are the public property of the Nation and can not be the subject of private ownership," is approved.

The COURT. The 2nd request of the petitioner, "That the shore of and submerged land under the waters of the St. Marys River are subject to the servitude in respect of navigation created in favor of the Federal Government by the Constitution," is approved.

The COURT. The 3rd request of the petitioner, "That the dominion of the United States over the navigable waters for the purpose of commerce is the same as over the public domain," is disapproved.

To which holding and ruling of the court disapproving said request, the petitioner did then and there except because said request number 3 is the law.

The COURT. The 4th request of the petitioner, "That it matters little whether the United States has or has not theoretical ownership and dominion in the waters, or land under them; it has, what is more, the regulation and control of them for the purpose of commerce," is approved.

526 The COURT. The 5th request of the petitioner, "That the navigable waters of the United States, with their beds, for the purpose of commerce and navigation being the public property of the Nation when any portion of this property is required by the United States for its uses in aid of navigation there is no condemnation necessary. It is only necessary for Congress to order the taking of the part needed for the specified use," is approved with the modification that the requirement for navigation must not be too incidental and remote.

The petitioner did then and there except to said modification because said request number 5 stated the law and should have been approved without any qualifications.

Counsel for the respondent, Chandler-Dunbar Water Power Company, did then and there except to the qualified ruling respecting request number 5 on account that the ruling should have been an unqualified disapproval of the same.

The COURT. The 6th request of the petitioner, "That the necessity or expediency of appropriating a part or all of the waters of St.

Marys River for public use cannot be the subject of judicial cognizance," is disapproved. So broadly stated.

To which ruling the petitioner did then and there except because said request number 6 is the law.

Counsel for the respondent, Chandler-Dunbar Water Power Company, did then and there except to the qualified ruling respecting request number 6, on account that the ruling should have been an unqualified disapproval of the same.

527 The COURT. The 7th request of the petitioner, "That the act of March 3, 1909, did not mention specifically that compensation should be paid to the riparian owner for the taking of the waters of St. Marys River, and did not contemplate such a payment, for in section eleven it provided 'any moneys payable by the Government under the provisions of this section shall be payable out of any money heretofore authorized or appropriated for the purpose of improving St. Marys River at the Falls, Michigan,' and the money authorized and appropriated before (heretofore) the passage of said act of March 3, 1909, amounted to only 'one hundred thousand dollars' (act of June 30, 1906, 34 Stat. L., 739), and since March 3, 1909, 'two hundred and twenty-five thousand dollars' (act of March 4, 1909, 35 Stat. L., 998), these sums together amounting to $325,000, which is $225,000 less than the proposed award for water power, $550,000, leaving nothing for the value of the physical properties and uplands," is disapproved.

To which ruling the petitioner did then and there except because said request number seven is the law and should be approved.

The COURT. The 8th request of the petitioner, "That there is now no appropriation by Congress out of which the sum of $550,000 may be paid for 'water power' and none 'heretofore' made for that purpose," is disapproved. No appropriation appears by this record, but the fact that Congress has not made an appropriation is not controlling.

To which ruling the petition did then and there except because said request number eight is the law and should be approved.

The Chandler-Dunbar Water Power Company did then and
528 there except to the qualified ruling respecting request number eight on account that the ruling should have been an unqualified disapproval of the same.

The COURT. The 9th request of the petitioner, "That the fifth amendment to the Constitution provides only that private property shall not be taken without compensation, making no reference to public property," is approved.

The COURT. The 10th request of the petitioner, "That while the submerged land remains a part of the bed of the river it is not private property in the sense of the fifth amendment to the Federal Constitution," is disapproved. So broadly stated.

To which ruling the petitioner did then and there except, because said request number ten is the law and should be approved.

To which ruling the respondent, Chandler-Dunbar Water Power Company, did also except, on account that the ruling should have been an unqualified disapproval of the same.

The COURT. The 11th request of the petitioner, "That compensation cannot be claimed for damages done to riparian owners where property is taken or their rights restricted in aid of commerce and navigation," is disapproved. So broadly stated.

To which ruling the petitioner did then and there except, because said request number eleven is the law and should be approved without qualification.

To which ruling the respondent, Chandler-Dunbar Water Power Company, did then and there also except, on account that the ruling should have been an unqualified disapproval of the same.

529 The COURT. The 12th request of the petitioner, "That under the power conferred upon Congress by the Constitution to regulate commerce, the United States possesses, provided Congress sees fit to exercise it, the right to control all structures and works which interfere in any manner with the navigable capacity of navigable waters of the United States which, either by themselves or in connection with other waters, for channels for interstate commerce," is approved, but not controlling on the question of compensation.

To which ruling the petitioner did then and there except, because said request number twelve is controlling on question of compensation and is the law, and the same should have been approved without qualifications.

To which ruling the respondent, Chandler-Dunbar Water Power Company did also except, on account that the ruling should have been an unqualified disapproval of the same.

The COURT. The 13th request of the petitioner, "That the creation of any obstruction to the navigable capacity of any of the waters of the United States, not affirmatively authorized by Congress is unlawful, and it is unlawful to construct or commence the construction of any bridge, dam, dike, or causeway over or in any port, road-tead, haven, harbor, canal, navigable river, or other navigable water of the United States until the consent of Congress to the building of such structures shall have been obtained and until the plans for the same shall have been submitted to and approved by the Chief of Engineers and by the Secretary of War, a violation of which shall be deemed a misdemeanor punishable by a fine or imprisonment (sections 9, 10, and 12, act of March 3, 1899, 30 Stat. L., p. 1151)," is dis-

530 approved. So broadly stated.

To which ruling the petitioner did then and there except, because said request number thirteen is the law and should have been approved.

To which ruling the respondent, Chandler-Dunbar Water Power Company, did also then and there except, on account that the ruling should have been an unqualified disapproval of the same.

The COURT. The 14th request of the petitioner, "That in view of the provisions of sections nine, ten, and twelve of said act of March

3, 1899, structures of any character cannot lawfully be placed in or over any of the navigable waters of the United States without permits issued by consent of Congress upon the recommendation of the Chief of Engineers when approved by the Secretary of War," is disapproved. So broadly stated.

To which ruling the petitioner did then and there except, because said request is the law and should have been an unqualified approval of the same.

To which ruling the respondent, Chandler-Dunbar Water Power Company, did also then and there except, on account that the ruling should have been an unqualified disapproval of the same.

The COURT. The 15th request of the petitioner, "That to preserve the navigable waters for purposes of navigation such permits must contain terms and conditions and be revocable at the pleasure of the Government according to the needs of navigation, otherwise the control of said waters would be in part surrendered to private parties," is approved, but the needs of navigation must not be merely imaginary.

531 To which qualification the petitioner did then and there except because said request fifteen is the law and should have been approved without qualification.

To which ruling the respondent, Chandler-Dunbar Water Power Company, did also then and there except, on account that the ruling should have been an unqualified disapproval of the same.

The COURT. The 16th request of the petitioner, "That permits were given to erect structures in St. Marys River by consent of Congress and were revoked in no uncertain terms by that body in section 11, act of March 3, 1911, which declared that said permits 'shall cease and determine' on a day certain under all circumstances and did not provide any compensation," is approved. This correctly states the record.

To which ruling the respondent, Chandler-Dunbar Water Power Company, did then and there except, on account that the ruling should have been an unqualified disapproval of the same.

The COURT. The 17th request of the peititioner, "That when said permits were revoked no official of the Government had the right to extend or renew the same without the consent of Congress, or to make any compensation therefor," is approved.

To which ruling the respondent, Chandler-Dunbar Water Power Company, did then and there except on account that such is not the law.

The COURT. The 18th request of the petitioner, "That a court has not the power to decide or assume permits will be issued to persons to erect structures in navigable waters under the control of Congress, in view of the provisions of the act of March 3, 1899," is

532 approved, but not controlling on the question of compensation.

To which ruling the petitioner did then and there except, because said request eighteen is the law and should have been approved without qualification.

To which ruling the respondent, Chandler-Dunbar Water Power Company, did also then and there except, on account that the ruling should have been an unqualified disapproval of the same.

The COURT. The 19th request of the petitioner, "The courts of the United States will take judicial notice that the waters described in the petition and known as St. Marys River is a public navigable waterway of the United States, continuously, from Lake Superior to Lake Huron, it being a part of the Great Lake system and a connecting waterway therein," is approved.

The COURT. The 20th request of the petitioner, "There is no legal interruption to the actual navigable capacity and character of said river adjacent to the uplands described in the petition, of which said courts will also take judicial notice," is disapproved. So broadly stated. There is no interruption to the legal navigable character of this water. Its actual navigation capacity is much affected by physical facts.

To which ruling the petitioner did then and there except, because said request twenty is the law, and the ruling should have been an unqualified approval of the same.

The COURT. The 21st request of the petitioner, "The people of the United States own the right under treaties and the law of nations to navigate said waters, from shore to shore, and more particularly under the laws of the United States from the south shore to
533 the international boundary line throughout the full extent of the river, and to use the improve it in aid of such right of navigation, to which right of public ownership and use, private ownership and use of the submerged land therein and waters flowing over the same is subservient and that such navigation right, with all its incidents, is a part of the public domain of the United States and a paramount right in said river," is disapproved. So broadly stated.

To which ruling the Government did then and there except, because such request number twenty-one is the law and should be approved without the qualification.

To which ruling the respondent, Chandler-Dunbar Water Power Company, did then and there except, on account that the ruling should have been an unqualified disapproval of said request.

The COURT. The 22nd request of the petitioner, "The power of the people of the United States to regulate and use all said waters for the purpose of their navigation has been lodged in their Congress. Congress possesses the exclusive right to exercise said power as a political function," is approved.

To which ruling the respondent, Chandler-Dunbar Water Power Company, did then and there except, on account that such is not the law.

The COURT. The 23rd request of the petitioner, "The Federal courts possess no power to parcel out the waters of said navigable river between the public and the private owner of the submerged lands, which are appurtenant to the uplands described in the peti-

tion, and declare by a judgement or decree that any portion of said navigable waters is not needed for navigation and is surplus
534 water over and above navigation needs, is the absolute private property of the riparian owner, and that, if used by the public in its exercise of the right to regulate navigation on said river, either now or in the future, must be either condemned or bought and paid for from the owner of the fee to such subaquerous lands," is disapproved. So broadly stated.

To which ruling the petitioner did then and there except, because said request is the law, and the ruling should have been an unqualified approval.

To which ruling the respondent, Chandler-Dunbar Water Power Company, did also except, on account that the ruling should have been an unqualified disapproval of the same.

The COURT. The 24th request of the petitioner, "The determination of Congress, by the provision of section 11, act of March 3, 1909, 35 U. S. Stats., p. 820-1-2, of the necessity for the vacation of the river bed of St. Marys River at the Falls, by private persons or corporations (who have heretofore occupied the same and developed, to a certain extent, water power in said river), because of the public necessity of the occupation thereof, for the purpose of regulating navigation and erecting improvements therein, and requiring said power development companies to vacate the bed of the stream and the taking of the possession thereof and erection upon the submerged lands of public works, in aid of navigation, is not a taking of private property for public use, within the meaning of the fifth amendment to the Federal Constitution and requires no condemnation or compensation before such right upon the submerged lands may be exercised," is disapproved. So broadly stated as applied to some of the conditions existing in this case.

535 To which ruling the petitioner did then and there except, because said request 24 is the law and should have been approved without qualification.

To which ruling the respondent, Chandler-Dunbar Water Power Company, did then and there except, on account that the ruling should have been an unqualified disapproval of the same.

The COURT. The 25th request of the petitioner, "If, in the installation in said river bed of public works of the Government, primarily intended as improvements to navigation or in the methods of said navigation, carried on by the Government, there may be from time to time found a quantity of water which can be availed of for developing power, it is competent for the Government to conserve and use said power from the economic policy of preventing waste of natural resources; it is merely incident to regulation of navigation and is not a taking of private property without compensation for the Government to use, sell, or lease such possible surplus water power so developed by its own works in aid of navigation and apply the proceeds to the Public Treasury," is approved. But the intention that the public works should be an improvement to navigation must be

real and not a pretense. If in part a pretense, then pro tanto the result specified in this request will not follow.

To which ruling the petitioner did then and there except, because said request twenty-five is the law and should have been approved without qualification.

To which ruling the respondent, Chandler-Dunbar Water Power Company, did then and there except, on account that the ruling should have been an unqualified disapproval of the same.

536 The COURT. The 26th request of the petitioner, "None of the permits which are in evidence that were issued by the Secretary of War to the Chandler-Dunbar Company or the Edison Sault Electric Company or their predecessors relative to their occupancy and use of the river for the purpose of developing power therein created any vested property right, as against the organized public seeking to improve navigation, to continue such occupancy of the river bed and to continue to use and develop such power after all the permits were revoked, as by the terms of said permits they were all revocable and have been revoked," is approved, but such permits and their history may have evidential force on the subject of what is surplus water appropriated for power.

To which ruling the petition did then and there except, because said request twenty-six is the law, and the ruling should have been an unqualified approval, and because treating said permits and their history as evidential is applying the doctrine of estoppel against the Government.

To which ruling the respondent, Chandler-Dunbar Water Power Company, did then and there except, on account that the ruling should have been an unqualified disapproval of the same.

The COURT. The 27th request of the petitioner, "A failure or refusal of said companies or persons so occupying and using said river bed and the waters therein to vacate the river bed after revocation of such permits, and a continued occupancy and possession by them of the same with their structures and machinery for their private uses is developing power after such revocations were to
537 take effect constituted them, per se, public nuisances in said river," is disapproved. So broadly stated.

To which ruling the petitioner did then and there except, because said request twenty-seven is the law, and the ruling should have been an unqualified approval thereof.

To which ruling the respondent, Chandler-Dunbar Water Power Company, did then and there except, on account that the ruling should have been an unqualified disapproval of the same.

The COURT. The 28th request of the petitioner, "The governmental necessity to have the lands described in the petition for the purpose of erecting thereon canals and locks and other public works in aid of navigation is not an element of value to be added to making up the owners' award and not an increment of value in said property to which the private owner is entitled. Nor can the favorable location of the property, for the installation of canals and locks thereon

or a so-called strategic value claim therein be considered as a factor, for the purpose of enhancing the value of the property to the private owner in these proceedings, since such value would be made up of the necessity of the Government to have the property for a public use. Public works herein described are authorized and constructed in the general interests of the people in aid of interstate marine commerce on the Great Lakes and not for the enhancement of the value of private property upon which they are or may be erected," is disapproved as an entirety.

To which ruling the petition did then and there except, because said request twenty-eight should have been approved.

538 The COURT. The 29th request of the petitioner, "By a deed from the Chandler-Dunbar Water Power Company to the United States, dated Jan. 22nd, 1908, recorded in liber 67 of deeds, page 54, a certain strip of land located, generally, next north of the then canal lands was deeded to the United States for a recited consideration of one dollar. Certain letters written by the Chandler-Dunbar Company concerning and claiming as the consideration for said deed various rights of way, trackage privileges and concessions on and over the said canal lands, in said river, to a certain parcel known as the Government dump, and over other Government property within the reserved lands at the site of the locks and canals, then being erected and now in process of erection, which letters are in evidence, created no vested rights over, upon, and to said lands and in said river bed, as claimed in and by said letters. Said lands were all within a Government reservation, they were not open to public entry by any law of the United States, and for the purpose of creating any easement, license, permits, incumbrances, or servitudes upon any of the lands described in the petition or any of the other premises in the rapids, or within such reservation, which is claimed to have created any vested interest therein or any greater right than a permit, revocable at the pleasure of the Government under the laws of the United States regulating its public navigable waters or its reservations of public lands, are void and the acts of any officer of the United States having in view the creation or recognition of any such rights upon said lands as claimed by the said company, to the extent of creating thereby any vested interest in it, were ultra vires acts," is approved.

539 To which ruling the respondent, Chandler-Dunbar Water Power Company, did then and there except, on account that the ruling should have been an unqualified disapproval of the same.

The COURT. The 30th request of the petitioner, "If any value above one dollar, the recited consideration in said deed, attaches to said lands and the conveyance thereof to the United States, for which said company is entitled to compensation from the United States, its remedy is not in this proceeding but is in the Court of Claims," is approved. But the facts referred to in requests 29 and 30 have a bearing on the amount of compensation to be awarded for the further lands now taken.

To which ruling the petitioner did then and there except, because said request 30 is the law, and the ruling should have been an unqualified approval of the same.

To which ruling the respondent, Chandler-Dunbar Water Power Company, did also except, on account that the ruling should have been an unqualified disapproval of the same.

The COURT. The 31st request of the petitioner, "The declaration of Congress, found in section 11 of the river and harbor bill (being act of Congress of March 3rd, 1909, Revised Statutes, pages 820–1–2), as follows: 'That the ownership in fee simple absolute by the United States of all lands and property of every kind and description north of the present St. Marys Falls Ship Canal throughout its entire length and lying between said ship canal and the international boundary line at Sault Ste. Marie in the State of Michigan, is necessary for the purpose of navigation of said waters and the
540 waters connected therewith,' is conclusive, final, and binding on this court," is approved. But the exact character and effect of the necessity declared are questions remaining for consideration.

To which ruling the petitioner did then and there except, because said request thirty-one is the law and the ruling should have been an unqualified approval thereof.

To which ruling the respondent, Chandler-Dunbar Water Power Company, did also then and there except, on account that the ruling should have been an unqualified disapproval of the same.

The COURT. The 32nd request of the petitioner, "The subaqueous land the the usufruct of the water adjoining the premises of the Chandler-Dunbar Water Power Company are the public property of the Nation and their use is under the control of Congress," is disapproved.

To which ruling the petition did then and there except, because said request thirty-two is the law and should have been approved.

The COURT. The 33rd request of the petitioner, "The Chandler-Dunbar Water Power Company have no private property in the subaqueous land, or the usufruct of the water adjoining to its uplands as against the Government which requires compensation by the Government," is disapproved.

To which ruling the petitioner did then and there except, because said request thirty-three is the law and should have been approved.

The COURT. The 34th request of the petitioner, "The Chandler-Dunbar Water Power Company have no way of necessity over the Government lands," is approved.

541 To which ruling the respondent, Chandler-Dunbar Water Power Company, did then and there except, on account that such is not the law.

The COURT. The 35th request of the petitioner, "The title to Portage Street, so-called, never passed from the Government and was in the Government at the date of taking," is approved.

To which ruling the respondent, Chandler-Dunbar Water Power Company, did then and there except, on account that such is not the law.

The COURT. The 36th request of the petitioner, "The value of any of the premises for lock and canal purposes cannot be taken into consideration in making the award," is disapproved.

To which ruling the petitioner did then and there except because said request thirty-six is the law.

The COURT. The 37th request of the petitioner, "The strategic value of any of the property taken cannot be considered in making the award," is disapproved.

To which ruling the petitioner did then and there except, because said request thirty-seven is the law.

The COURT. The 38th request of the petitioner, "Vested rights cannot be acquired under revocable permits from the Government, and the Chandler-Dunbar Water Power Company acquired no vested rights in the St. Marys River by reason of the issuance to them of the revocable permits," is approved. I give only evidential force to the permits and their history.

To which ruling the petitioner did then and there except, be-
542 cause said request thirty-eight is the law and should have been approved without qualification, and for the further reason that to give evidential force to the permits and their history is to apply the doctrine of estoppel against the Government.

The respondent, Chandler-Dunbar Water Power Company, did also then and there except to said ruling on account that the ruling should have been an unqualified disapproval of the same.

The COURT. The 39th request of the petitioner, "Any obstruction in the St. Marys River without the permission of the Government is a nuisance per se. No riparian owner has the right to put any dam or other obstruction in the stream," is disapproved. So broadly stated. I conceive there might be obstructions which could not by any possibility injuriously effect the public right.

To which ruling the petitioner did then and there except, because said request thirty-nine is the law and should have been approved, and further, because it is not a judicial question to be determined by the courts what obstructions in the navigable waters shall be erected.

To which ruling the respondent, Chandler-Dunbar Water Power Company, did also except, on account that the ruling should have been an unqualified disapproval of the same.

The COURT. The 40th request of the petitioner, "The Chandler-Dunbar Water Power Company is estopped by reason of its acceptance of the revocable permits from claiming against the Government any private property in the subaqueous lands or the usufruct of the waters of St. Marys River," is disapproved.

543 To which ruling the petitioner did then and there except, because said request forty is the law.

The COURT. The 41st request of the petitioner, "Congress is the only authority that can make an award upon the grounds of moral obligation, and courts in condemnation proceedings are not authorized to make awards against the Government on this ground," is approved.

To which ruling the respondent, Chandler-Dunbar Water Power Company, did then and there except on account that the ruling should have been an unqualified disapproval of the same.

The COURT. The 42nd request of the petitioner, "Riparian owners along navigable rivers have no private property in such streams against the Government, cannot dam or obstruct them without governmental license, and therefore are not entitled to compensation from the Government when appropriated by the Government for public purposes," is disapproved. So broadly stated.

To which ruling the petitioner did then and there except, because said request forty-two is the law and should have been approved.

To which ruling the respondent, Chandler-Dunbar Water Power Company, did then and there except, on account that the ruling should have been an unqualified disapproval of the same.

The COURT. The 43rd request of the petitioner, "That the damages to be paid should be determined by the detriment occasioned to the owner of the property taken, and the amount thereof should be neither increased nor diminished by the fact that the property taken is peculiarly well adapted to the purposes of the expropriator," is approved. I do not regard this as inconsistent with the
544 conclusion that suitability for lock and canal purposes is one element of value to be considered, because the detriment of the owners consists in the taking of every element of value which the property had.

To which ruling the petitioner did then and there except because said request forty-three is the law and should have been approved without qualification and the qualification of the court is not the law.

To which ruling the respondent, Chandler-Dunbar Water Power Company, did also then and there except, on account that said ruling should have been an unqualified disapproval of the same.

The COURT. The 44th request of the petitioner, "I find as a matter of law that under Act I, section 8 of the Constitution of the United States which provides that Congress shall have power 'to regulate commerce with foreign nations and among the several States, and with the Indian tribes,' the riparian rights of the Chandler-Dunbar Company in the subaqueous land and the usufruct of the waters flowing over such land are subject to the paramount right of the United States for the purpose of commerce which includes navigation without compensation or condemnation, such submerged lands and waters being public and not private property," is disapproved. So broadly stated. Such waters and subaqueous land are not public property excepting to the extent necessary for the public purposes.

To which ruling the petitioner did then and there except because said request forty-four is the law and said request should have been

approved, and for the further reason that the modification is not the law.

To which ruling the respondent, Chandler-Dunbar Water
545 Power Company did also then and there except, on account that the ruling should have been an unqualified disapproval of the same.

The COURT. I proceed now to consider the special requests for ruling of law as heretofore filed by the respondent, Chandler-Dunbar Water Power Company:

Request number 1 of the Chandler-Dunbar Water Power Company, "Section 11 of act of Congress approved March 3, 1909, read in the light of the report of the Rivers and Harbors Committee, recommending the passage thereof, indicates an intention on the part of Congress to provide for payment to the Chandler-Dunbar Water Power Company of the value of the water power existing on its lands," is disapproved. So broadly stated.

To which ruling the respondent, Chandler-Dunbar Water Power Company, did then and there except.

Request number 2 of the Chandler-Dunbar Water Power Company, "When the title of the riparian to the bed and flow of the waters of public navigable rivers is taken by the United States, it must make just compensation for the taking of title, the use being all that is primarily subject to be taken for the purpose of navigation," is disapproved. So broadly stated.

To which ruling, the respondent, Chandler-Dunbar Water Power Company, did then and there except.

Request number 3 of the Chandler-Dunbar Water Power Company, "The proper and primary right of the United States to the bed and flow of water of public navigable rivers is to use and manipulate the same in the interest of navigation and it has no power under that claim of right to take the fee title in either the bed or the flow without just compensation for such taking," is disapproved.
546 So broadly stated. The proper use may be so absolute and permanent that there is no remaining fee of any substantial value.

To which ruling the respondent did then and there except.

The 4th request of the Chandler-Dunbar Water Power Company, "The United States has taken the title to the bed and flow of the St. Marys River which was property of the Chandler-Dunbar Water Power Company, as a riparian, subject to the paramount right of the United States to use same for purposes of navigation, and of the State of Michigan to use same for purposes of navigation, fishing, bathing, and perhaps municipal water supply.

"Just compensation requires payment of the value thereof, diminished only by the effect of such paramount rights, Federal and State, upon such value. Such diminution should be adjusted, not on possibilities of future discoveries or imaginary future methods of navigation, but upon present and fairly calculable future methods

and needs," disapproved, as to possible interpretations of the last sentence.

To which ruling the respondent, Chandler-Dunbar Water Power Company, did then and there except.

The 5th request of the respondent, Chandler-Dunbar Water Power Company, "The question is, what would the bed and flow of the river appurtenant to the Chandler-Dunbar Water Power Company uplands have probably been worth to that company, or to its successors in title, if the United States had condemned the upland and from time to time taken only so much of the bed and flow as it might need for fullest development and improvement in aid of navi-
547 gation," is disapproved, as applied to facts of this case.

To which ruling the respondent, Chandler-Dunbar Water Power Company, did then and there except.

The 6th request of the respondent, Chandler-Dunbar Water Power Company, "Such use of the flow of the water and submerged land for private—proprietary—purposes as it appears probable that the United States may and will make, or can properly make, should be supposed to have been within the capacity of the riparian to make and just compensation should be fixed on such basis," is disapproved.

To which ruling the respondent, Chandler-Dunbar Water Power Company, did then and there except.

The 7th request of the respondent, Chandler-Dunbar Water Power Company, "In considering the just compensation to be awarded the Chandler-Dunbar Water Power Company on account of the taking of title to this water power, it must be supposed that the United States while fostering to the utmost the interests of, and improvement of navigation, would not cause any interfernce with or diminution of, the value of such riparian water power beyond such interference or diminution as would be necessary for such fostering of and improvement of navigation," is approved, but this involves considering the character and extent of the controlling necessity.

The respondent, Chandler-Dunbar Water Power Company, did, then and there, except to such modification and approval.

To which ruling the petitioner did, then and there, also except, because said request number 7 should have an unqualified disapproval.

548 The 8th request of the respondent, Chandler-Dunbar Water Power Company, "Just compensation requires the allowance to the Chandler-Dunbar Water Power Company of the value of the use of the water which the United States has planned to divert into the power canal of the Michigan Lake Superior Power Company, and to lease by the United States for power purposes. Such allowance not to exceed the value of the use of the same by the Chandler-Dunbar Water Power Company on its submerged lands," is disapproved.

To which ruling the respondent, Chandler-Dunbar Water Power Company, did then and there except.

The 9th request of the respondent, Chandler-Dunbar Water Power Company, "Just compensation requires the allowance to the Chandler-Dunbar Water Power Company of the value of the use of the water which the United States has planned to impound by the present works being now constructed in the bed of the river for power purposes. Such allowance not to exceed the value of the use of the same by the Chandler-Dunbar Water Power Company on its submerged lands," is disapproved.

To which ruling the respondent, Chandler-Dunbar Water Power Company, did then and there except.

The 10th request of the respondent, Chandler-Dunbar Water Power Company, "The compensation to which the Chandler-Dunbar Water Power Company is entitled for its property taken, can not be substantially less than the property—proprietary—value acquired by the United States by the taking," is approved; but the United States now acquires, by the taking, only that servient (in a certain sense) interest which it did not already possess.

548½ To which modification the respondent, Chandler-Dunbar Water Power Company, did then and there except.

To which ruling the petitioner did then and there except, because the ruling should have been an unqualified disapproval of said request.

The 11th request of the respondent, Chandler-Dunbar Water Power Company, "The United States, by its taking title for other purposes than public and governmental—that is, for the purpose of creating water power for private—proprietary—use for revenue, has put upon the court the necessity of calculation of the extent and effect of uncertain elements. Hence, the burden of proof is upon the United States to the extent and effect of such uncertain elements," is disapproved.

To which ruling the respondent, Chandler-Dunbar Water Power Company, did then and there except.

The 12th request of the respondent, Chandler-Dunbar Water Power Company, "It appearing that the United States has taken the title to the bed and flow of the St. Marys River belonging to the Chandler-Dunbar Water Power Company, instead of, or in addition to, the use, and that there is an excess of flow and bed over and above that part, the present use of which is needful for purposes of navigation, and that such excess of flow and bed is of value to the riparian for power purposes, the burden of proof to show the diminution of such value, on account of the dominant estate of the United States to use the same in the interest of navigation rests upon the United States," is disapproved.

To which ruling the respondent, Chandler-Dunbar Water Power Company, did then and there except.

The 13th request of the respondent, Chandler-Dunbar Water Power Company, "It is not competent for the United States to take,
549 without compensation, the property of the American riparian at the Sault to satisfy Canada for a taking of common water at some other point," is approved.

To which ruling the petitioner did then and there except because said request should have been disapproved.

The 14th request of the respondent, Chandler-Dunbar Water Power Company, "It is not competent for the United States to reduce, without just compensation, the water power of the riparian upon the St. Marys River by artificially increasing the discharge from Lake Superior through the St. Marys River in order to counteract the effect upon Lake Michigan-Huron caused by the outflow through the Chicago Drainage Canal," is disapproved, it being understood that the request contemplates increasing the discharge by means which would not increase the flow over the lands of the riparian. I do not think the question with reference to the Chicago Drainage Canal alone exists, but do think that controlling the relative levels of all the Great Lakes, by whatever cause such relative levels might otherwise be affected, as a part of the navigation power the exercise of which cannot call for compensation.

To which ruling the respondent, Chandler-Dunbar Water Power Company, did then and there except.

The 15th request of the respondent, Chandler-Dunbar Water Power Company, "If the United States, acting under the law for this taking, diverts the water of a navigable river into a channel other than the natural channel and in such artificial channel there is a fall in the flow of the water corresponding to the fall in the flow in the natural channel on the land of the riparian and the United States avails, or may avail, itself of the power of such fall for profit, in such artificial channel, compensation is due to the riparian. Such compensation should be adjusted on the basis of the value of the use to the United States of that power which is so taken from the natural channel and transferred to the artificial channel, not exceeding its fair value to the riparian for use in the natural channel," is disapproved, understanding that the transfer to the artificial channel was directly in aid of navigation and not with the primary purpose of producing power.

To which ruling the respondent, Chandler-Dunbar Water Power Company, did then and there except.

The 16th request of the respondent, Chandler-Dunbar Water Power Company, "If in its operations in the interest of navigation at Sault Ste. Marie, under the act for this taking, the United States should build a dam on its own submerged land below the submerged land of the Chandler-Dunbar Water Power Company, and so drown out or obliterate the water power on the Chandler-Dunbar land, the power inherent in the fall of the water in its natural condition on the Chandler-Dunbar lands would be transferred to the dam in the rapids below, and would be in the control of the United States for revenue, and just compensation should be made for its value to the Chandler-Dunbar Company based on the value to the United States of the power so transferred not exceeding its fair value to the company for use on its lands," is disapproved. Understanding that the works specified were primarily in aid of navigation.

To which ruling the respondent, Chandler-Dunbar Water Power Company, did then and there except.

The 17th request of the respondent, Chandler-Dunbar Water Power Company, "If, in the improvement of navigation at
551 the Sault Rapids, under the act for this taking, the water power of the Chandler-Dunbar Water Power Company should be transferred in any way from the submerged lands of that company and brought into conditions where it, including the fall due to the lands of that company, might be used for power by the United States, compensation would be due the Chandler-Dunbar Water Power Company, based upon the value of the use of its power by the United States, not, however, exceeding its value to such company for use by it as a riparian," is disapproved. I intend this and the two previous rulings to be that a riparian proprietor on this particular waterway and with its special, attendant conditions, owns the usufruct of the flowing water subject to the contingency that it may be obliterated without compensation to him when such destruction is the incidental effect of works constructed in or along the same waterway with the primary purpose of aiding navigation, and that the fair possibility of such destruction, in whole or in part, must be considered in awarding compensation for a taking before such destruction has become imminent.

To which ruling the respondent, Chandler-Dunbar Water Power Company, did then and there except.

The 18th request of the respondent, Chandler-Dunbar Water Power Company, "Presumably the Canadian courts would enforce the rights of American riparians against wrongdoers on the Canadian side of the international boundary. Also, presumably, the Federal courts would enforce the rights of Canadian riparians against wrongdoers on the American side," is approved, but it does not appear that an American riparian has, as such, any rights on the Canadian side of the boundary.

To which ruling the petitioner did then and there except,
552 because said ruling should have been an unqualified disapproval of said request.

The 19th request of the respondent, Chandler-Dunbar Water Power Company, "The act of Congress of September 26th, 1850, providing for the settlement of claims for land at Sault Ste. Marie, did not authorize any acknowledgment to be made of map of the village therein provided for, but required the map to be transmitted to the Commissioner of the General Land Office.

"Under the statute of the State of Michigan in force at the time of the making of said map, called the Whelpley map, a map without an acknowledgment was of no force or validity for purposes of a statutory dedication," is approved.

To which ruling counsel for the United States did then and there except because said request is not the law.

The 20th request of the respondent, Chandler-Dunbar Water Power Company, "Subject to the power of Congress to regulate

commerce, the Chandler-Dunbar Water Power Company, as a riparian proprietor, was entitled to the continued natural flow of the water of the River St. Mary past its shore without diminution or alteration." is approved.

To which ruling counsel for the United States did then and there except.

The 21st request of the respondent, Chandler-Dunbar Water Power Company, "The right to build a wing dam in the bed of the River St. Mary is a common-law right, which has not been modified or changed in Michigan by the Constitution or any statute, and is in force in the State of Michigan, excepting as the same is subject to the power of Congress to regulate," is approved, except as to
553 effect of being on national boundary.

To which ruling counsel for the petitioner did then and there except, on account that said request is not the law, and should have had an unqualified disapproval.

The 22nd request of the respondent, Chandler-Dunbar Water Power Company, "The Chandler-Dunbar Water Power Company was not legally required to obtain a permit or consent of the board of supervisors of Chippewa County to put improvements or structures in the River St. Mary," is approved.

To which ruling counsel for the petitioner did then and there except, on account that the said request is not the law.

The 23rd request of the respondent, Chandler-Dunbar Water Power Company, "The Chandler-Dunbar Water Power Company is entitled, on account of its water power taken, amounting, on the basis that one-half of the flow of the river is appurtenant to the American shore, to 35,000 theoretical horsepower, to just compensation therefor," is disapproved.

To which ruling the respondent, Chandler-Dunbar Water Power Company, did then and there except.

The 24th request of the respondent, Chandler-Dunbar Water Power Company, "The Chandler-Dunbar Water Power Company is entitled to the value of the use on a nine-foot head of the volume of water planned to be used for water-power purposes by the United States in the bed of the stream," is disapproved.
554 To which ruling the respondent, Chandler-Dunbar Water Power Company, did then and there except.

The 25th request of the respondent, Chandler-Dunbar Water Power Company, "In addition to the item named in conclusion XX, the Chandler-Dunbar Water Power Company is entitled to the value of the use of the volume of water planned to be used for water-power purposes through the Michigan-Lake Superior Power Company's canal, and which such canal has capacity to divert and use, and which amount respondent claims to be 20,000 cubic feet per second," is disapproved.

To which ruling the respondent, Chandler-Dunbar Water Power Company, did then and there except.

The COURT. I will now proceed to consider similar requests filed and presented by counsel for the St. Mary's Power Company and the Michigan-Lake Superior Power Company, respondents.

These respondents' request number 1, "In determining the value to be assigned to Island No. 5, in view of the natural conditions presented, the value of the water power should be determined as a unit proposition, and therefore Island No. 5 is entitled to that proportion of value which the fall in front of Island No. 5 bears to the total fall," is disapproved.

To which ruling the said respondents, St. Mary's Power Company and the Michigan-Lake Superior Power Company, did then and there except.

These respondents' request number 2, "It is not a proper
555 rule of law to segregate Island No. 5 as a distinct parcel and determine the water power appurtenant to it as valueless," is approved.

To which ruling the petitioner did then and there except, because the ruling should have been a disapproval of said request.

These respondents' request number 3, "Island No. 5, by reason of its location, has a natural value for lock and canal purposes, and has a special desirability for either or both of such purposes," is approved (but thought to be a conclusion of fact).

To which ruling the petitioner did then and there except, because the ruling should have been a disapproval of said request.

These respondents' request number 4, "Island No. 5 has a strategic value of a substantial character, one capable of pecuniary measurement, and on which account compensation should and must be paid for such element of value," is approved.

To which ruling the petitioner did then and there except, because the ruling should have been a disapproval of said request.

These respondents' request number 5, "The United States is not entitled, simply by virtue of the ownership of the intervening land between the Chandler-Dunbar properties and those of the St. Mary's Company, namely, Island No. 5, to act arbitrarily in refusing to join in a development of the falls as a unit," is disapproved.

To which ruling the respondents, St. Mary's Power Company and the Michigan-Lakes Superior Power Company, did then and there except.

556 These respondents' request number 6, "No findings of law are intended to be made by the court which are intended to affect or define the rights of the Chandler-Dunbar Water Power Company and of the Michigan-Lake Superior Power Company, either as respects past, present, or future contentions as between the parties," is approved, except with reference to the 6,500 horsepower, if the Michigan-Lake Superior Power Company claims any rights pertaining thereto. (See general ruling No. 43).

To which ruling the petitioner did then and there except.

557 The COURT. Having been requested to make specific findings of law in this case, I will now announce them, as follows:

I. In a general, preliminary way, and subject to the modifications hereafter specified, the Chandler-Dunbar Company was the lawful owner of the flow and fall of the water; that is to say, the water power rights over against its riparian lands, out to the international boundary line.

To which the petitioner did then and there except on account that such is not the law.

II. As to all the property described in the notice of taking herein there was, as matter of law, a necessity for taking for public use.

To which the respondent, Chandler-Dunbar Water Power Company, did then and there except, on account that such is not the law.

III. The public right to occupy and use, in direct aid of navigation, submerged lands is paramount to the rights of the private owner, and when such paramount right is exercised by a physical occupation no right to compensation accrues.

IV. The act of Congress involved and its legislative history do not evidence an intent to recognize the existence of and to pay for all the water power rights appurtenant to the lands described in the act; and the act and the taking do not raise a necessary inference of law that compensation is due for all of such water power rights.

To which the respondent, Chandler-Dunbar Water Power Company, did then and there except on account that such is not the law.

558 V. The act of Congress involved does not raise the necessary implication of law that no compensation should be paid for any of the water-power rights taken.

To which the petitioner did then and there except on account that such is not the law.

VI. The existing necessity in this case for taking the uplands and some of the submerged lands and flow of the water for purposes of navigation is actual, present, and direct; as to the remainder of the submerged lands and the flow of the water, such necessity is constructive, secondary, and incidental.

To which the petitioner did then and there except on account that such is not the law.

VII. For the taking of the submerged land and the flow of the water directly necessary under the previous paragraph there can be no compensation; for that as to which only the incidental necessity exists compensation must be paid.

To which the petitioner did then and there except on account that such is not the law.

VIII. Where private rights (as water-power rights) are being taken for public use, under the necessity of the constructive or incidental class, the burden is upon the private owner seeking compensation to show that the necessity is only theoretical; in other words, and as applied to this case, the burden is on the private owners to

show that the surplus water not now needed for navigation, will not ever be so needed.

To which the petitioner did then and there except on account that such is not the law.

559 To which the respondent, Chandler-Dunbar Water Power Company, did also then and there except on account that such is not the law.

IX. In such case the burden of proof must rest on the private owner of the water power to show, first, that after the satisfaction of the public right, there will remain a portion of the whole power now being taken, and, second, that this remainder portion is substantial and not speculative but capable of reasonably certain determination from the proof.

To which the petitioner did then and there except on account that such is not the law.

To which the respondent, Chandler-Dunbar Water Power Company, did also then and there except on account that such is not the law.

X. The United States is not estopped to dispute either the extent or the value of the water power rights for which compensation should be paid.

To which the respondent, Chandler-Dunbar Water Power Company, did then and there except on account that such is not the law.

XI. The United States is not estopped to deny that such water power rights have any existence which justify assessing any value in this proceeding.

To which the respondent, Chandler-Dunbar Water Power Company, did then and there except on account that such is not the law.

XII. The effect of the act and of the instrument of taking is that all private water rights which there may be, appurtenant to the land described, shall be taken, and that compensatory value shall be paid for any such rights, if any, which are not merged in the dominant public right.

560 To which the petitioner did then and there except on account that such is not the law.

To which the respondent, Chandler-Dunbar Water Power Company, did also then and there except on account that such is not the law.

XIII. For the purpose of determining the sale value of water power property of this kind, the annual rental value should be capitalized at ten per cent.

To which the petitioner did then and there except on account that such is not the law.

To which the respondent, Chandler-Dunbar Water Power Company, did also then and there except on account that such is not the law.

XIV. In each case of this character, the extent of the supercession and absorption of the private right by the dominant public right is a question of fact; and the extent of the servient estate for which

compensation is to be assessed in this case must be determined as a specific question in view of the particular facts of this case.

To which the petitioner did then and there except on account that such is not the law.

To which the respondent, Chandler-Dunbar Water Power Company, did also then and there except on account that such is not the law.

XV. Public works in direct aid of navigation which should physically occupy all the submerged lands involved so that the flowing water must be diverted elsewhere, or which should flood the lands involved with slack water so that the fall of the water would be elsewhere, would be a kind of taking of the private water
561 power rights for which compensation would not be due.

To which respondent, Chandler-Dunbar Water Power Company, did then and there except on account that such is not the law.

XVI. If the title of the private owner of submerged lands fails through the assertion of a superior title, he has no separable, remaining interest in the flow and fall of the water thereover; nor if his title fails to part of the channel has he any right to have the water normally flowing thereover diverted to another part of the channel, the title to which he retains.

To which respondent, Chandler-Dunbar Water Power Company, did then and there except on account that such is not the law.

XVII. In determining the compensation to be awarded for private water rights if taken for public use, it is not to be presumed nor is it a contingency to be considered that the public may arbitrarily refuse to permit the erection of structures necessary to develop the power, and which structures do not, in fact, in any manner injuriously affect the public right of navigation.

To which the petitioner did then and there except on account that such is not the law.

XVIII. The present record does not justify the conclusion that it might not at some future time be within the limits of discretion of the public officials supervising this waterway to refuse to permit the erection or maintenance of such a cross dam and dike as are proposed by the private owners for the development of the water power.
562 To which the respondent, Chandler-Dunbar Water Power Company, did then and there except on account that such is not the law.

XIX. It is not to be presumed nor is it a contingency to be considered in assessing compensation that the Government would not permit, upon the submerged land, structures necessary to develop the water power and which did not, in fact, affect the public right of navigation, excepting upon the payment of a burdensome license fee in the nature of a rental.

To which the petitioner did then and there except on account that such is not the law.

XX. It cannot be assumed that a future Congress will abdicate its right to build, at this point or in this vicinity, suitable works to

control the level of Lake Superior, and will accept in the place thereof the right to regulate a privately built, similar structure.

To which respondent, Chandler-Dunbar Water Power Company, did then and there except on account that such is not the law.

XXI. No understanding between the Chandler-Dunbar Company and the Secretary of War or his subordinates, in connection with the Chandler-Dunbar deed of January, 1908, can operate to destroy public rights or to create vested interest as against the public; but as a basis of fixing the value of property affected by such understanding and now taken, it should be assumed that such understanding will be carried out in good faith by the United States.

To which the petitioner did then and there except on account that such is not the law.

563 XXII. No license from the board of supervisors of Chippewa County would be necessary before erecting by the Chandler-Dunbar Company of its proposed cross dam and dike.

XXIII. It can not be presumed that the Chandler-Dunbar Company could procure the erection of a dam reaching across to the Canadian shore, nor any necessary flowage of Canadian lands above such dam. Neither the laws of the United States nor of the State of Michigan provide any means for accomplishing such a result.

To which the respondent, Chandler-Dunbar Water Power Company, did then and there except on account that such is not the law.

XXIV. The burden is upon the riparian owners to show a practical and efficient means of developing power for which they ask compensation.

To which the petitioner did then and there except on account that such is not the law.

To which respondent, Chandler-Dunbar Water Power Company did also then and there except on account that such is not the law.

XXV. There can be no presumption that the Canadian Government would acquiesce in the proposed plan of development by the Chandler-Dunbar Company, or that it would join or permit its citizens to join in similar development structures on the Canadian side of the line.

To which respondent, Chandler-Dunbar Water Power Company, did then and there except on account that such is not the law.

564 XXVI. In this case the prima facie or normal rights of the riparians to the benefit of the inchoate power on their submerged land (above the maximum 4,000 c. s. f. estimate for the locks, etc.), is so unusually and peculiarly hampered, undertain, and vague as to put upon the riparians the burden of showing by clear and convincing evidence that the water power for which they ask compensation is beyond the objection that the difficulties of the situation make it too speculative for computation.

To which the petitioner did then and there except on account that such is not the law.

To which respondent, Chandler-Dunbar Water Power Company, did also then and there except on account that such is not the law.

XXVII. The force of the private developments which have been permitted by the United States is evidential; and they do not raise any estoppel against the United States to claim that compensation should not be paid when the permits are revoked.

To which petitioner excepts to that part which reads as follows: "The force of the private developments which have been permitted by the United States is evidential," on account that such is not the law.

To which respondent, Chandler-Dunbar Water Power Company did then and there except on account that such is not the law.

XXVIII. In a situation where it is highly probable that there is surplus water which will never be directly needed for navigation, but where the riparian proprietor is unable to show with sufficient clearness how much such surplus is, evidence that the United States,
speaking by the acts of those representing it, has acquiesced
565 in a claim or joined in a declaration that certain water is subject to appropriation for power, is of strong evidential force to establish the fact so declared; and in a case otherwise doubtful, may be sufficient to meet the burden resting on the riparian.

To which the petitioner did then and there except, on account that such is not the law.

XXIX. The fact that the diversion through the Michigan-Lake Superior Power Canal was at first supposed not to diminish the flow of water through the rapids on the American side, and the fact that this diversion has been under the control and regulation of the War Department and has been stopped when the War Department thought best, destroy the force of such diversion as evidence upon the question of what water may be beyond need in aid of navigation.

To which respondent, Chandler-Dunbar Water Power Company, did then and there except, on account that such is not the law.

XXX. The present United States project for the development of power in the rapids has no evidential force upon the question of what water is beyond need in aid of navigation.

To which respondent, Chandler-Dunbar Water Power Company, did then and there except, on account that such is not the law.

XXXI. The history of the Chandler-Dunbar-Edison Sault electric development tends to establish that the water appropriated thereby is and will be surplus water beyond that need for navigation which will not well justify taking without compensation.

To which petitioner did then and there except, on account that such is not the law.

566 XXXII. For the purpose just named, the amount of water necessary to develop within the limits of the Chandler-Dunbar property the amount of horsepower which the existing works contemplated developing is to be considered as the amount so appropriated rather than the amount which will develop such power under the additional head which has been permitted, and rather than

the amount which will pass the head works in their present condition.

To which petitioner did then and there except, on account that such is not the law.

XXXIII. Water sufficient to develop 6,500 theoretical horsepower is to be considered as surplus water capable of producing power, for which compensation should be awarded to Chandler-Dunbar Water Power Company in this proceeding.

To which petitioner did then and there except, on account that such is not the law.

XXXIV. Where private property is to be taken for a public improvement, the fact that the property is so situated that it is naturally suitable for such public improvement and may be desired therefor is one of the elements to be considered in determining just compensation when it is so required and taken; but what it may be worth to the public for such improvement is not the proper measure.

To which the petitioner did then and there except, on account that such is not the law.

XXXV. No water power rights, as such, in connection with the Portage Street parcel are entitled to any compensation.

567 XXXVII. The fact that the United States, before commencing this proceeding, made an offer to the St. Marys Power Company for Island No. 5, and upon its refusal made the St. Marys Power Company a respondent to this proceeding, does not estop the United States from continuing to claim, in the pending ejectment suit, that it is the owner of this island. The compensation awarded for this island and its appurtenant rights should be paid into court there to await the determination of the title, to which St. Marys Power Company did then and there except, on account that such is not the law.

XXXVIII. The fact that there can be no commercial development of itself of the water power inchoate and in the flow and fall of water over the submerged lands appurtenant to Island No. 5 will not prevent an award of some compensation for the taking of such potential water power.

To which the petitioner did then and there except, on account that such is not the law.

XXXIX. The fact that there is intervening ownership between the fall of the Chandler-Dunbar Company and the fall of Island No. 5 makes it improper to award compensation for the water power appurtenant to Island No. 5 wholly upon the basis of its percentage of the total fall of the two riparian proprietors added together, to which St. Marys Power Company did then and there except, on account that such is not the law.

XL. In the absence of any appropriation by the owners of Island No. 5 of any of the water flowing by, there is no sufficient evidence that any of such water is surplus water beyond need in aid of navigation, and the owners of such island are entitled to no compensation whatever directly on account of water power, to which St. Marys

Power Company did then and there except, on account that such is not the law.

568 XLI. The so-called strategic value, that is to say, its usefulness in permitting full and economical power development by other riparian owners, is an element to be considered in awarding compensation for Island No. 5.

To which the petitioner did then and there except, on account that such is not the law.

XLII. The 6,500 horsepower, for which compensation is awarded to the Chandler-Dunbar Company, is not affected by any rights claimed by the Michigan-Lake Superior Power Company, and the latter company has no interest whatever in such 6,500 horsepower or in the compensation awarded therefor, to which St. Mary's Power Company did then and there except, on account that such is not the law.

XLIII. Such dispute as exists between the Chandler-Dunbar Company and the Michigan-Lake Superior Company should be considered as pertaining to some portion of the surplus above 6,500 horsepower, which surplus is found to be subject to be taken without compensation, and no finding in this matter of fact or of law is intended to have any bearing upon such dispute.

XLIV. The Whelpley survey was, at most, as to the streets thereon marked, an implied dedication in trust, requiring acceptance before it could become operative.

XLV. The facts of this case do not justify the conclusion that there was any such acceptance by the city of that part of Portage Street north of the canal grant.

XLVI. Reasonable time and opportunity for such acceptance long ago expired.

XLVII. Whenever it became finally apparent that there was no acceptance by the city of such part of Portage Street, no title
569 or interest passed to the adjoining owners, but the fee title reverted to or remained in the United States.

To which respondent, Chandler-Dunbar Water Power Company, did then and there except, on account that such is not the law.

XLVIII. No acceptance by the city of this part of the street can be implied from its acceptance of the part south of the canal.

XLIX. No title to this part of Portage Street has accrued to the Chandler-Dunbar Company by adverse possession.

L. The award of compensation otherwise to be made to the Chandler-Dunbar Company on account of its uplands along the rapids should be diminished by seven per cent, on account of its lack of title to the Portage Street subparcel contained thereon.

To which respondent, Chandler-Dunbar Water Power Company, did then and there except, on account that such is not the law.

LI. If it should be held that the city has title to such Portage Street parcel, then it should receive as compensation in this proceeding seven per cent of the amount awarded to the Chandler-Dunbar Company for this entire upland parcel.

The COURT. From the view taken of the facts, and which will be specified in the findings to be filed, it follows as matter of law that the compensation for the property and rights described in the petition should be fixed as follows:

(a) To the Michigan-Lake Superior Power Company, nothing.

(b) To the St. Marys Falls Power Company, $21,000.00.

(c) To the city of Sault Ste. Marie, nothing.

(d) To the Edison Sault Electric Company, $300,000.00.

570 (e) To the Chandler-Dunbar Water Power Company, $652,312, this sum being made up as follows:

For the raw water power	$550,000
For the existing dike	16,524
For the upland, excepting claims 95 and 96 ($65,000 less seven per cent on account Portage Street subparcel)	60,450
Claims 95 and 96	25,000
Half interest in subparcel on bridge property	338
	$652,312

571 And thereupon counsel for the United States excepted in the respects hereinafter indicated to that portion of Paragraph LI of findings of law as reads as follows:

"The COURT. From the view taken of the facts and which will be specified in the findings to be filed, it follows as matter of law that the compensation for the property and rights described in the petition should be fixed as follows: * * *

"(b) To the St. Marys Falls Power Company, $21,000."

"(e) To the Chandler-Dunbar Water Power Company, $652,312, this sum being made up as follows:

For the raw water power	$550,000
For the existing dike	16,524
For the upland, excepting claims 95 and 96 ($65,000, less seven per cent on account of Portage Street subparcel)	60,450
Claims 95 and 96	25,000
Half interest in subparcel on bridge property	338
	$652,312"

II.

There should be eliminated therefrom as compensation to the St. Marys Power Company the entire sum of $21,000, because said island is the property of the United States and said company never had any right, title, or interest in or to the same.

III.

If said company does own said island, there should be eliminated therefrom—

1. $5,000 * * * "as an additional value by reason of its special suitability for lock and canal purposes," * * * as found in Paragraph LXX (c) of findings of fact, for the reason that as a matter of law the governmental necessity to have the said

572 island for the purpose of erecting thereon canals and locks and

other public works in aid of navigation and incident thereto, pursuant to the regulation of interstate and international commerce, is not an element of value competent to be included in making up the award of compensation to the owner of said island, nor can its favorable location for the installation thereon of canals and locks be treated as a factor for the purpose of enhancing its value to the private owner, since such value is made up of the necessity of the Government to have the property for public use.

2. There should also be eliminated therefrom a further sum of $15,000 * * * "as a strategic value out of the extent to which it may control or block the most available development by upstream owners," * * * as found in Par. LXX (b) of findings of fact, for the reason—

(a) That the said so-called strategic value is not an increment competent to be awarded to the owners thereof as a part of their compensation in these proceedings, there being no appurtenant potential water power attaching to the said island.

(b) The premises next westerly from said island on the main shore and also the shore lands on the south side of the channel between said island and the main shore is the property of the United States and there is no probability that any power company could acquire said Government lands for the purpose of developing water power thereon in connection with Island No. 5.

(c) No upper riparian owner is affected by any strategic value in connection with said island. No private owner thereof as against the United States could manipulate any asserted riparian right attaching to said island to thwart the Chandler-Dunbar Water Power Company or any other upper private riparian
573 owner in the development of power on their premises, for the reason that said upper riparian owners possess no right to develop power as against the Government, since it has taken all said upper riparian submerged lands, as well as the shore lands, for the purpose of installing works thereon in aid of navigation.

IV.

There should be eliminated therefrom as compensation to the Chandler-Dunbar Water Power Company the sum of $550,000 for the "raw water power," for the reason—

(a) That the Chandler-Dunbar Water Power Company's title to the submerged lands is burdened with a trust which vests in the public the usufruct of said waters, and the right to erect structures on the submerged lands for public navigation uses without condemnation or compensation, which beneficial rights are a part of the public domain and are paramount public rights in the river. In the exercise of these rights, all the submerged lands and the usufruct of the water flowing over the same have been appropriated by the United States under section 11 of the act of March 3, 1909, for navigation uses in the improvement of the Great Lakes system, of which said

waters of the St. Marys River is a constituent part, said taking and appropriation having been exercised by Congress pursuant to the 3d clause of Article I, section 8, of the Constitution. When so taken and appropriated by the Government, neither the usufruct of said waters nor the submerged lands are to be treated in these proceedings as the private property of the owner of the uplands to which they are appurtenant, within the meaning of the 5th amendment to the Federal Constitution, and requires no compensation before such taking, appropriation, and use for navigation purposes, whether
574 direct, incidental, or constructive.

(b) The said Chandler-Dunbar Water Power Company possesses no vested right, title, or interest, by any grant, permit, or license by virtue of which it possesses and owns said waters and the power which is potential therein, as against the public, when exercising its paramount rights pursuant to its powers over navigation.

(c) All of its previously existing revocable permits have been revoked by legal authority, and upon such revocation it is required to vacate the river bed and give way to navigation improvements authorized by law. And Congress did not intend to create evidence to be used against the Government with any force whatever for the purpose of building up values for water power by authorizing, as it has, revocable permits to be issued to power companies to develop power at the falls, when their revocation should be ordered by Congress. It is incompetent to so find in effect such fact and use said instruments as evidential of acquired vested rights against the Government by virtue thereof.

(d) Congress did not intend to award compensation for the usufruct of said waters or the potential water power therein, in order that it may use the same for the purpose previously stated.

(e) Said company has no way of necessity or right of access to its uplands over the Government lands by which they are abutted. The Indian reservation uplands it owns are surrounded by Government lands, and no output from any power plant or factory constructed thereon has a right of way to market over Government lands,
575 and, on the undisputed testimony relating to the consideration for the deed of Jan. 22, 1908, as a matter of law, it has no such way, either by grant, easement, license, or necessity, to and from said lands over said Government lands surrounding their said Indian reservation lands.
lands.

(f) For the further reason that the special findings of fact therein referred to and upon which said value is based numbered 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 40, 41, 42, 48, 59, 60, 61, 62, 63, 64, 66, 67, and 72, in so far as said special findings in the paragraphs indicated pursue the inquiry and purport to find facts as to navigation necessities, present or prospective, actual or constructive, as correlated to power development conditions, past, present, or prospective, as a basis of award, verdict, or finding against the Government for actual or

potential power values in excess of navigation necessities which must be compensated for, is a subject not competent for inquiry as a judicial question, and the assumption by the court of jurisdiction so to do impinges upon the political legislative powers of Congress under the commerce clause of the Constitution as the exclusive tribunal for the regulation of the use, control, and disposal of said waterway for the purpose of navigation and its incidents within the shore line of said river adjacent to the Falls, to the international boundary, as exercised by Congress in the enactment of secs. 11 & 12 of the act of Mch. 3, 1909, and the prosecution of the work therein directed; and in the exercise of which power, even to the extent of the entire exclusion of power developments constructed by the Chandler-Dunbar Company or its privies on submerged lands, it may exercise without condemnation of or compensation for the asserted title of
576 the Chandler-Dunbar Company to the submerged lands or the waters flowing over the same.

(g) For the Chandler-Dunbar Water Power Company at any time to enter the said river and erect any structures on the submerged lands without the permission of the United States would constitute per se a public nuisance in said river, and would be a misdemeanor within the meaning of sections 9, 10, and 12 of the act of March 3rd, 1899.

(h) As a matter of law, on the undisputed testimony, the purported consideration for the deed of January 22nd, 1908, gave no vested right, title, or interest to the said Chandler-Dunbar Company to a license, way, or easement to cross Government lands for the purpose of gaining access to said property to which said water power is appurtenant, and without which way said lands are without value to said company for power developments, and no value, as a matter of law, should have been found for said property upon the basis of the asserted consideration for such deed.

(i) In the installation, in part, in said river bed appurtenant to these uplands, of public works of the Government, primarily intended by Congress as improvements of the methods of navigation on said river in connection with the Great Lakes system, devised and constructed pursuant to the provisions of secs. 11 and 12 of the act of Mch. 3, 1909, if there be, from time to time, found a quantity of water which may be availed of for developing power, it is competent for the Government to conserve and lease or use the said power from the economic policy of preventing waste of natural resources. Such conservation furnishes no ground for the owner of the barren title to the submerged land to claim, or be entitled to, com-
577 pensation for any power thus incidentally developed or possible of being so developed in the prosecution of public works primarily intended as improvements to navigation facilities on the river.

The taking and appropriation of the river bed of St. Marys River at the Falls, having in view the primary object of constructing and operating works therein for the regulation of navigation and an in-

cidental development of power pursuant to said act is not a taking of private property without compensation within the meaning of the fifth amendment, and the Government may use or lease such possible surplus water power so developed by its own works primarily in aid of navigation and apply the proceeds to the Public Treasury.

V.

As to that portion which reads as follows: "For the upland, excepting claims 95 and 96 ($65,000, less seven per cent, on account Portage Street subparcel), $60,450," there should be eliminated therefrom the sum of $18,600.00 and the sum of $23,250.00, for the reason that the $18,600.00 item which is added to its value by reason of its availability for use as a factory site in connection with the development of 6,500 h. p. either as a single site or for several smaller factories to use the surplus of 6,500 h. p. not now used in the city, is not an increment of value for which it is entitled to compensation in these proceedings, because it is based and is dependent on the arrested right of the company to develop said water power, which in law does not exist, for the same reasons as set forth in Paragraph IV, subdivisions "a" to "i," inclusive, of these exceptions, and which are made a part of this paragraph without their repetition; and for the reason that the $23,250 item, which is added
578 to its value for its desirability for use for lock, canal, and bridge purposes, is not a competent increment of value therein to be awarded as a part of the compensation, because, as a matter of law, the governmental necessity to have the said lands for the purpose of erecting thereon canals and locks and other public works in aid of navigation and incident thereto, pursuant to the execution of the power of Congress to regulate interstate and international commerce is not an element of value to be included in making up the amount of compensation due the owner of said lands, and is not an increment of value on said property to which the private owner is entitled. Nor can the favorable location of the property, for the installation of canals and locks thereon or a so-called strategic value claimed therein be considered as a factor for the purpose of enhancing the value of the property to private owner in these proceedings, since such value would be made up of the necessity of the Government to have the property for a public use. Public works herein described are authorized and constructed in the general interests of the people in aid of interstate marine commerce on the Great Lakes, and not for the enhancement of the value of private property upon which they are or may be erected.

2. Because there is not a scintilla of evidence in the case that the location of a bridge site on said property is contemplated by anyone having power or authority to execute such a project.

3. Because there is no act of Congress in existence permitting the construction of a bridge, or any treaty or agreement with Great

Britain contemplating the construction of a bridge across said river and anchoring its abutments or approaches on these premises.

579 4. Because no international bridge can be constructed across said river without the approval of Congress.

5. Because such bridge value is mere speculation and not within the zone of probability.

6. Because the findings of fact which purport to establish a basis of value upon those elements are legally incompetent inquiries. Which paragraphs of the findings of fact so objected to are as follows: Paragraphs 43 and 54.

VI.

From the compensation found which the Chandler-Dunbar Company should be awarded for, "Claims 95 and 96, $25,000," there should be eliminated the sum of $15,000; that portion of it is made up of two incompetent items (that is to say, $10,000 "by reason of its desirability for lock and canal purposes," and $5,000 * * * "in connection with the land along the rapids if used as a part of the development of 6,500 h. p." * * *) for the reason that, as a matter of law, the finding of fact No. 45, which purports to find the $10,000 as value for lock and canal purposes, is legally incompetent, since Governmental necessity to have said lands for the purpose of erecting thereon canals and locks and other public works in aid of navigation and incident thereto, pursuant to the regulation of interstate and international commerce, is not an element of value competent to be included in making up the award of compensation for said claims, nor can their favorable location for the installation of canals and locks be treated as a factor for the purpose of enhancing their value to the private owner, since such value is made up of the necessity of the Government to have the property for public use.

580 And the said $5,000 for its connected use with land along the rapids for development of 6,500 h. p. for the reason—

(a) That the finding of fact No. 45, which finds such value, is a finding of an incompetent fact in these proceedings.

(b) The Chandler-Dunbar Water Power Company, as against the United States, was not the owner of an absolute vested right to develop that much water power or any water power in connection with the land along the rapids at the time of taking for which as against the United States it is entitled to any compensation or treatment as its absolute vested private property having value requiring compensation to it in these proceedings or which attaches as appurtenant to the said lands for that purpose.

(c) The Chandler-Dunbar Water Power Company owns and holds no right, title, and interest in and to any water power in the St. Marys River appurtenant to its uplands, and no compensation should have been found for said company on account of its ownership of private land claims 95 and 96, based on the value in connection with the development of any water power, and the exceptions taken herein

in Paragraph IV as the basic objection relating to water power, and from which this exception is derived, is made a part hereof as though fully set forth without repetition.

VII.

In the said Finding of Law LI, in the court's holding that it follows, as a matter of law, that the compensation for the property and rights described in the petition should be fixed as follows:

* * * "(e) To the Chandler-Dunbar Water Power Com-
581 pany, * * * for the raw water power, $550,000," petitioner further excepts thereto in this respect not conceding that the said company should be awarded any compensation for values based upon potential water power rights, yet, if it be the law that said company should have compensation fixed for water power, the said $550.000 is excessive, it not being legally entitled to that sum, if entitled to any, but to only such an allowance as is found by the extent of their actual development and output reduced to their own premises with their present efficient works actively placing on the market saleable horsepower; and on that basis the full extent, as a matter of law, to which the said company is entitled to compensation for their present actual development of power, is on the basis of the output of four wheels on a nine-foot effective head in accordance with the basis established in finding of fact No. 37, which determines that four wheels have been set and were in use. That "suitable wheels in the same location and under a 9-foot head would develop 225 horsepower (electrical) each," which for four such wheels is the equivalent of 1,428 theoretical horsepower (see finding of fact No. 12 as to this also), and with its value computed to ascertain their output in accordance with Nos. 14 and 15 of the findings of fact, produces a value of $142,800.00 of the present output on their own premises with present installation; and the excess of that up to $550,000.00 should, as a matter of law, be disallowed for potential water power, appurtenant to said second description if it is the law that it is entitled to any compensation for power. Further, in fixing the sum of $550,000.00 as the value of their actual diversion, impounded water, and developments, the inclusion of a portion of
their developments made on Government lands to attain a head
582 of 15 feet in order to find an intent to divert, impound, and use 6,500 t. h. p., is, as a matter of law, to the extent of about 6 feet extra head as a factor so used in finding that intent, the taking and appropriation of public property to the private use of said company. It is conferring upon it a gratuitous bounty and is totally invalid on its face.

VIII.

In said Paragraph LI of the conclusions of law which includes in fixing a part of the value of private land claims 95 and 96 the sum of $5,000 for its connected use in power developments with land along

the rapids, also in making up a part of the value of the uplands, excepting claims 95 and 96, the sum of $18,000.00 included for use as a factory site in connection with the development of 6,500 h. p. either for a single site or several smaller factories, also in making up the compensation to the owners of island No. 5 as a portion thereof the sum of $15,000 for stragetic purposes, petitioner further excepts to each of said items in this respect, as contained in said conclusion of law, not conceding that the owners are entitled to any compensation for those respective values based upon water power rights and their incidents or their stragetic purposes, yet, if it be the law that the said items so included in fixing such compensation are proper to be considered as elements going to make up the finding in said paragraph for the said uplands and Island #5; if it be determined that the Chandler-Dunbar Water Power Company is not entitled to more than its actual development, as set forth in the preceding
583 paragraph herein, then the values so fixed to said uplands and Island #5, by reason of their suitability for use in power development and for stragetic value to thwart power development, then the said values, so found, should as a matter of law be reduced in the same proportion as the value of the appurtenant water power of the Chandler-Dunbar Company is reduced below $550,000.00.

Which exceptions were then and there noted and allowed by the court.

Such rulings having been announced and exceptions taken, the trial was resumed and further testimony was heard.

Thereupon, the testimony was closed.

476 (The following pages, 149–197, inclusive, are out of order, and, in the printing of this bill of exceptions, should follow page 257.—DENISON, Circuit Judge.)

PROCEEDINGS OF DECEMBER 28, 1911.

The testimony having been closed and findings of fact, as requested, having been made by the court and filed in the clerk's office, and the various requests for findings with the action of the court thereon having been also filed, the said findings were announced by the court, and exceptions thereto were taken and made by the various parties as follows:

I. The stretch of water called St. Marys Falls or St. Marys Rapids is about 3,000 feet long, and was, in its natural state, from bank to bank, 4,500 feet wide. In passing this space the waters from Lake Superior fall some 18 feet and are the potential basis of a very large water power. There are islands upon the Canadian side, and the international boundary line, midway between the main banks, is near the main channel shore of those islands, whereby it results that, if there were no artificial obstructions, substantially two-thirds of the flow of water would be upon the American side of the line.

These waters have always constituted a recognized part of the navigable waters of the Great Lakes system. The Indian, French,

and colonial commerce in furs and Indian supplies passed over the rapids in canoes and bateaux. In the upland traffic the greater part of the materials were disembarked and carried around the rapids over a short portage, while the canoes themselves, with their loads downbound, and light upbound, passed over the rapids. In addition to canoes and barges, small schooners, as large as 75 tons,
477 were occasionally floated down the rapids, instances being recorded as early as 1775 and as late as 1846, and Mackinaw boats of 50 feet were taken up.

II. As commerce increased, its necessities were met by a tramway supplanting the old portage, and the cargoes of both up and down boats were transshipped and carried along this tramway of about a mile.

Later, canals were built, reaching from above the rapids to below the rapids, and lift locks were placed in such canals, both on the Canadian side and on the American side of the Falls.

As commerce increased, the canals were increased in size and efficiency and larger locks built until the present time.

III. Between the north line of the canal grant on the American side and the shore of the upper rapids there remained a block of land some 2,500 feet long and varying throughout most of its length from 150 to 250 feet in width.

This intervening strip, according to the Whelpley plat, contained a village lot (3); parts of private claims 3, 4, 95, and 96; part of a former Indian reservation, and part of Portage Street.

The fall in the river, the water power of which is the subject of the main contention herein, was in the rapids fronting on the upper part of the so-called Indian reservation.

IV. All this property (excepting an undivided half of a part of village lot 3 and a part of private claim No. 3 and excepting Portage Street) was owned at the time of the taking herein by the
478 Chandler-Dunbar Water Power Company, excepting only a strip thereof of the width of about 100 feet lying next north of the north side of the canal grant, which was, in January, 1908, conveyed by the said company to the United States.

The other undivided half of part of village lot 3 and part of private claim No. 3 was owned by Sault Ste. Marie Bridge Company, operating an international railroad bridge across the River St. Mary.

V. The part of the so-called Indian reservation involved herein was entered by Wm. Chandler by use of Porterfield scrip, on application made in 1880, resulting in issue of patent in 1883.

The cost to the patentee of this parcel, containing about nine acres, was inconsiderable, except for the large expense of contest and appeal on application to enter.

Title to this property came to the Chandler-Dunbar Water Power Company from Mr. Chandler.

VI. The United States made claim that the patent to the Indian reservation did not operate to convey two islands, numbered 1 and 2, in the bed of the stream, and that the patent was invalid for the

reason that the land therein described was, in fact, not subject to entry because it was an Indian reservation, and because the same land had not been properly surveyed. The United States filed its bill to establish its title to said islands, and the Supreme Court of the United States finally, in 1908, held that the statute of limitations had run against any indirect attack upon the validity of the patent and that the patent carried title to the islands.

479 VII. In 1907 (there being two locks on the American side) it was decided to construct a third parallel lock. For this and for canal widening then and before then determined on, more land became necessary, and, after long negotiations, the Chandler-Dunbar Water Power Company quitclaimed to the United States, in January, 1908, the strip of land 2,500 feet long and averaging 100 feet wide along the upper side of the canal lands before referred to, thus correspondingly lessening the width of the strip remaining to private ownership. This quitclaim was for a nominal money consideration, but in connection with substantial benefits hereinafter mentioned.

A fourth lock was then, and now is, in indefinite contemplation.

VIII. In March, 1909, Congress, by act approved March 3, 1909, enacted that the United States would take not merely the land presently necessary for the third lock, but all the privately owned property between the northerly existing canal strip line and the international boundary line.

The Secretary of War filed with the register of deeds of Chippewa County, Michigan, wherein said premises lie, on December 30th, 1909, the necessary instrument declaring the taking, and proceeded with construction work. This action is to fix "just compensation" to be paid to the property owners for the property so taken. Preliminary thereto, the United States offered, and the Chandler-Dunbar Water Power Company refused, $375,000.00 for its property and that of the Edison Sault Company, herein involved; and a similar offer of

480 $10,000.00 was made and refused for Island No. 5, hereinafter described.

IX. No question exists as to the necessity for taking the dry land. It will all be directly required for the proposed locks, canal, and forebay, and use for these purposes is use for navigation. As to the submerged lands out to the boundary, the matter is not so clear. A large part is clearly not directly necessary at present for the needs of navigation, but such part is so connected with and incidental to the other directly and presently necessary portion as to be affected by and brought within the same pervading necessity and as to make it proper for Congress to take the whole.

As to all the property described, a necessity for taking for public use exists as matter of fact.

The necessity for taking all, as applied to the facts here, is a necessity of peculiar character. It may be called a constructive as distinguished from an actual necessity. As to the excess beyond a certain amount of land and water, the taking is secondary and incidental to the taking of the primary body now needed.

The petitioner did then and there except to so much of Finding of Fact IX as reads as follows, namely, "As to the submerged lands out to the boundary the matter is not so clear. A large part is clearly not directly necessary at present for the needs of navigation, but such part is so connected with and incidental to the other directly and presently necessary portion as to be affected by and brought within the same pervading necessity and as to make it proper for Congress to take the whole. * * * The necessity for taking all,
481 as applied to the facts here, is a necessity of peculiar character. It may be called a constructive as distinguished from an actual necessity. As to the excess beyond a certain amount of land and water, the taking is secondary and incidental to the taking of the primary body now needed." Because such facts as are herein stated and found are not facts for judicial inquiry or finding, but are exclusively for the consideration and determination of Congress under the commerce clause in Article I, section 8 of the Constitution of the United States, Congress in section 11 of the act under consideration here having determined the necessity, such determination is final and binding on the court.

And the respondent, The Chandler-Dunbar Water Power Company, did then and there except to so much of Finding of Fact IX as reads as follows: "As to all the property described, a necessity for taking for public use exists as matter of fact. The necessity for taking all, as applied to the facts here, is a necessity of peculiar character. It may be called a constructive as distinguished from an actual necessity. As to the excess beyond a certain amount of land and water, the taking is secondary and incidental to the taking of the primary body now needed." On account that such part of such finding are not sustained by any evidence but are contrary to the proofs in the case.

X. If no water was to be used beyond 4,000 c. s. f. (that is, a flow of 4,000 cubic feet per second), and no land was to be occupied beyond the amount necessary for locks and appurtenant structures to use that amount of water according to present methods, the remaining water could be made to flow over the remaining land and to develop thereon its full power.

482 XI. The amount of water flowing out of Lake Superior depends primarily upon the height of the lake, and this has fluctuated over a margin of about three feet during the past 50 years. During the 47-year period ending 1907 the average flow was about 80,000 c. s. f.; for the 25-year period ending with 1909, about 75,000 c. s. f. For the years 1907–8–9 the average flow was slightly above 64,000 c. s. f., and this is the proper measure for this case.

The general well-known alarm about lowering lake levels and fear of still lower would, in the mind of an intending purchaser and his advising engineers, counterbalance the theoretical possibility of rising levels.

And the respondent, Chandler-Dunbar Water Power Company, did then and there except to such part of Finding of Fact XI as reads as follows: "And this 64,000 c. s. f. is the proper measure for this case." On account that such finding is not sustained by any, but is contrary to all the proofs in the case, and that according to the proofs it appears that 75,000 c. s. f. is the proper measure for this case.

Said respondent did also then and there except to that part of Finding XI, which is as follows: "The general well-known alarm about lowering lake levels and fear of still lower would, in the mind of an intending purchaser and his advising engineers, counterbalance the theoretical possibility of rising levels." On account that such matter is pure speculation and not matter for consideration as a fact in this case *in this case*.

XII. Between the upper and lower lines of the Chandler-Dunbar property, extended at right angles to the thread of the stream,
483 the fall is substantially 10 feet, with an effective head of 9 feet; and every 100 c. s. f. of flow equals 100 theoretical horsepower (on the wheel) or 70 electrical horsepower (on the switch board).

XIII. Two-thirds of the above total flow would, under original, natural conditions, flow over the Chandler-Dunbar Water Power Company's submerged lands.

XIV. There is a present established demand for a comparatively small amount of the raw (unimproved) power. The natural increase from the ordinary growth of the community will not more than counterbalance the loss when the Government construction work ceases. Any further demand must be created by the promotion of power-consuming concerns. The plan for promoting or securing a wood-pulp mill which would consume all the available power, storing, if necessary, its surplus product during the high water, is feasible and is reasonably probable of execution. Such probability is sufficiently definite and certain to justify the conclusion that all the power has a definite value, instead of the conclusion that most of it is too speculative for computation; and I adopt the former conclusion as the fact. I fix the annual value of the raw power per theoretical horsepower as follows: For the first 3,000 h. p., $10.00 each; for the second 3,000 h. p., $7.50 each; for all beyond 6,000 h. p., $5.00 each. The cost of development so far made should be added. These values are on the basis of a perfect and unincumbered right to the water.

To which finding of fact the petitioner did then and there except, because such facts as are therein stated and found are not facts for judicial inquiry or finding, but are exclusively for the consid-
484 eration and determination of Congress under the commerce clause in Article I, section 8, of the Constitution of the United States. Congress in section 11 of the act under consideration here having determined the necessity, such determination is final and binding on the court.

485 XV. The proper basis for capitalization is ten per cent.

To which Finding of Fact XV, the respondent, The Chandler Dunbar Water Power Company, did then and there except on account that such finding, so called, is a matter of which the court could take judicial notice and is not according to the truth of the matter, and that as a conclusion of law such is not the law.

XVI. The amount of commerce passing the rapids is beyond comparison with any other analogous waterway in the world. Indeed, perhaps, there is no analogous waterway. A high estimate of the value of the entire flow of the river for power would not exceed two million dollars per year, while the value of the river to the public as a commercial waterway is doubtless fifty times that amount. In the ordinary power stream the element of navigation is dormant and insignificant; here, it is active and overwhelming, and it is the power element which is comparatively insignificant.

XVII. The increase in navigation has been on geometrical ratio. The dream of one decade has been the reality of the next. One lock, planned for all future needs, has become inadequate before it was finished. We can fix what seem to be the maximum future limitations for this commerce; but such estimates may be as inaccurate as were those made 25 years ago.

The respondent, Chandler-Dunbar Water Power Company, did then and there except to so much of Finding of Fact XVII, which reads as follows: "The increase in navigation has been on geometrical ratio." On account that said finding is contrary to the proofs in the case as shown by the statistical report of the United States respecting the passage of freight through the locks at Sault Ste. Marie in the year 1910, being petitioner's Exhibit No. 89.

486 XVIII. If the upland in controversy had been taken for enlargement of canal and locks the riparian would have had no remaining upland to use in connection with the power development.

Such development wholly upon the submerged land would have carried unusual expense and contingencies.

Said respondent, Chandler-Dunbar Water Power Company, did then and there except to that clause of Finding of Fact XVIII, which reads as follows: "Such development wholly upon the submerged land would have carried unusual expense and contingencies." On account that said finding is contrary to the proofs in the case, and on account that there is no evidence in the case to support such finding.

XIX. Additional locks, canals, forebays, etc. (beyond the third lock), can be built to advantage only upon the submerged land. Congress might think best to provide a large number of locks so that the great blockades which occasionally occur could be cleared away in a few hours, although most of the locks would be idle most of the time. It is conceivable, though improbable, to suppose that structures of this class will eventually occupy all the space not

needed to pass floatable products. Then the surplus water must be diverted elsewhere. So, too, it is conceivable that Congress might construct works further down stream, flowing this space with slack water and getting all the fall at a lower point.

Said respondent, Chandler-Dunbar Water Power Company, did then and there except to all of Finding XIX, except the first sentence on account that it is not competent to consider such contingencies.

487 XX. The present use of the water in direct aid of navigation is only for filling and operating locks and for floating a few logs. The best expert judgement, both of the Waterways Commission and of the witnesses in this case, is that 4,000 c. s. f. is the maximum amount which will ever be used for these purposes; and, therefore, the amount to be needed for navigation, so far as the same can now be definitely determined, must be fixed at this figure, leaving the balance beyond need for navigation. I think, however, that owing to all the contingencies involved, it is impossible to fix this amount with sufficient certainty to make any definite finding of fact relating thereto, except as in this and in other paragraphs stated.

To which finding of fact the petitioner did then and there except because such facts as are therein stated and found are not facts for judicial inquiry or finding, but are exclusively for the consideration and determination of Congress under the commerce clause in Article I, section 8 of the Constitution of the United States, Congress in section 11 of the act under consideration here having determined the necessity, such determination is final and binding on the court, and for the further reason that said finding is not supported by the testimony.

XXI. Other methods of using the water in direct aid of navigation may be found, requiring more or all of the water. For example, smoothing out the bed could be made to give an even flow five feet deep, and up a part of such channel, light draft vessels could be hauled by the power generated from the water in the remainder of the channel. For further example, the whole power might be employed to operate a ship railway transporting vessels around the rapids; or a floatable product may develop, requiring much of

488 the width of the channel in order properly to be floated down. All these examples are highly improbable—probably fantastic, but not more so than the present volume of this commerce or the present methods of transmitting this power would have been a few years ago.

The respondent, Chandler-Dunbar Water Power Company, did then and there except to all of Finding of Fact XXI after the first sentence thereof on account that it is not competent to consider such contingencies.

XXII. The practice of the United States and of the riparians heretofore has been to grant and to obtain a permit to construct any works upon the submerged lands in the bed of the river and these

permits have been revocable in form, and those heretofore given have been formally revoked.

The respondent, Chandler-Dunbar Water Power Company, did then and there except to all of Finding of Fact XXII on account that same does not state (as the proofs show the fact to be) that such licenses were issued by the Secretary of War revocable at his pleasure.

XXIII. The contemplated method of developing the whole power is by dam across the American part of the river and a dike up along the international boundary, and it might be well within the limits of proper discretion for the Government not to permit such a structure. No reason has been shown, and I see none, why it would not be feasible for such a dam, under private ownership and management, to be fully subject to governmental control and regulation in all matters affecting navigation; but such divided control might cause complications. There is no clear authority therefor, and,
489 in the absence of further legislation, the engineering officers might find room, within the limits of sound discretion and good faith, to refuse such a permit.

The respondent, Chandler-Dunbar Water Power Company, did then and there except to all of Finding of Fact XXIII on account that the same does not state (as the proofs show the fact to be) that the dike or dam contemplated by respondent was to extend inside (instead of along) the international boundary.

Said respondent also excepts to the last sentence thereof, which is as follows: "There is no clear authority therefor, and, in the absence of further legislation, the engineering officers might find room, within the limits of sound discretion and good faith, to refuse such a permit." On account that it is not competent to consider such contingencies and on account that the court should proceed upon the supposition that the riparian would be permitted to make the best use of his property which it was practicable for him to make without injury to navigation or the full development thereof.

XXIV. From natural causes, the lake levels fluctuate over periods of years and even from year to year. Artificial causes, like the Chicago Drainage Canal, contribute. Every additional foot of water that can be had is of immense value. It may be desirable to hold back the waters of Lake Superior, to maintain or raise the level there; or it may be best to increase the discharge artificially for the benefit of the lower lakes. Both of these things have been done.

During part of every year, during recent years, the United States engineers have wholly stopped the flow of water through the Michigan-Lake Superior Power Canal, thus greatly lessening its value as a power producer.

490 The respondent, Chandler-Dunbar Water Power Company, did then and there except to that part of Finding of Fact XXIV, which is as follows: "Artificial causes, like the Chicago Drainage Canal, contribute." On account that it is not competent to consider such contingencies.

Said respondent also excepts to that part of the same, which is as follows: "Both of these things have been done." On account that it appears from the proofs that the natural outflow of Lake Superior has only been increased once for the benefit of the lower lakes and then at a time of extraordinary low water such as occurs once in forty to fifty years.

Said respondent also excepts to that part of the same which is as follows: "During part of every year, during recent years, the United States engineers have wholly stopped the flow of water through the Michigan-Lake Superior Power Canal, thus greatly lessening its value as a power producer." On account that the proofs show with proper remedial works, such as contemplated by the Chandler-Dunbar Water Power Company and the United States and Canada, no such stoppage of flow through the Michigan-Lake Superior Power Canal would be necessary.

The Michigan-Lake Superior Power Company and the St. Mary's Power Company except to that part of Finding XXIV which states "during part of every year, during recent years, United States engineers have wholly stopped the flow of water through the Michigan-Lake Superior Canal, thus greatly lessening its value as a power producer, for the reason that the uncontradicted evidence does not show that such flow was wholly stopped during a part on every year, but, on the contrary, shows that it was only partially or wholly stopped during each year."

XXV. It is for the interest of a power plant in the rapids that the river flow shall be constant and that the fluctuations should be in Lake Superior. It is for the interest of navigation in that lake that its level shall be constant and that the fluctuation shall be in the river flow.

491 XXVI. There are enthusiastic advocates of a plan for a series of dams in Niagara, Detroit, St. Clair, and St. Marys, giving slack-water navigation for vessels of 25 feet draft from Duluth to Buffalo. The execution of such a plan might, and probably would, obliterate this water power at this point and transfer it down the river.

XXVII. However unlikely this last-named plan may be, it is agreed by all that controlling works, consisting of some kind of a dam across the entire St. Marys River, built and operated through some joint arrangement with Canada, and by which the level of Lake Superior and its outflow could be regulated, would be an extremely desirable thing for both countries, and of great value to the commerce of the upper and lower Lakes.

XXVIII. Such a structure I regard as within the fair limits of possibility in the not very distant future. Its erection, if at some other point, would incidentally destroy the power inchoate at this point, and if the erection was at this point there would be a physical occupation of a greater part or all of the Chandler-Dunbar submerged lands, and the water power produced would be in the nature of an incidental by-product of the main navigation use.

The respondent, Chandler-Dunbar Water Power Company, did then and there except to all of Finding of Fact XXVIII, following the first period thereof, on account that the erection of the structure therein named by the Chandler-Dunbar Water Power Company would have been practicable and desirable if its property had not been taken, and is practicable and desirable on the part of the
492 United States in the improvement of navigation, and is contemplated by the United States, and the lands of the Chandler-Dunbar Water Power Company offer the most favorable location for the same as appears by the uncontradicted evidence.

XXIX. The Chandler-Dunbar lands, upland and submerged, are set off by the existing canal and locks. A bridge across these, to give free access, would be very burdensome to navigation. Ordinary foot traffic can continue upon the lock gates as it does. The railroad affords access to the upland for heavy traffic, and the maintenance of a sidetrack into this property was one of the things expected and arranged for when the quitclaim deed of January, 1908, was given. Claims 95 and 96 give full access to deep-water navigation on Lake Superior. Transmission wires for electricity could cross the canal, as is now done, by conduit under the same, without any prejudice or injury to the public use of the canal.

The petitioner did then and there except to so much of Finding of Fact XXIX, as reads as follows: "The railroad affords access to the upland for heavy traffic, and the maintenance of a sidetrack into this property was one of the things expected and arranged for when the quitclaim deed of January, 1908, was given. Claims 95 and 96 give full access to deep-water navigation on Lake Superior. Transmission wires for electricity could cross the canal, as is now done, by conduit under the same, without any prejudice or injury to the public use of the canal," because such facts as are therein stated and found are not facts for judicial inquiry or findings, but are exclusively for the consideration and determination of Congress under the commerce clause in Article I, section 8, of the Constitution
493 of the United States. Congress is section 11 of the act under consideration here having determined the necessity, such determination is final and binding on the court, and for the further reason that the proofs do not show that any valid contract was made between the Government of the United States and the Chandler-Dunbar Water Power Company for railroad facilities on Government property, and for the further reason that if any valid contract were made the rights of the Chandler-Dunbar Water Power Company under such contract could not be litigated in this proceedings, but must be presented in the form of a claim against the Government in the Court of Claims.

XXX. The plan for improvement proposed by the Chandler-Dunbar Water Power Company, and the only practicable plan which the record indicates, is the building of a dam at approximately right angles with the stream along the lower boundary of the Chandler-Dunbar submerged land, out to the thread of the stream, and then

the extension of this dam as a wing dam or dike, upstream, along the international boundary line. Theoretically, this would impound upon the American side of the dike and pass over the dam the same water which would naturaly flow over the same submerged land.

XXXI. Obviously, the erection of such a structure would practically affect the amount of water flowing on the Canadian side of the dividing wall. If, according to one suggestion, the crest of the natural rock dam at the head of the rapids on the American side of this dike should be scalped down a few feet in order to avoid friction and get better conditions on the wheels the tendency would be to divert water from the Canadian to the American side.

494 So, without such scalping, unless the wheels were so regulated as always to carry away exactly the proper amount, the tendency would be either to pull water into the American channel or to retard the flow on that side and flood the other side. These probable and possible effects might or might not be equalized by the erection of compensating works in the rapids or by using the Michigan-Lake Superior Power Canal for compensating purposes; but these things would be beyond the control of the Chandler-Dunbar Company.

The respondent, Chandler-Dunbar Water Power Company, did then and there except to all of Finding of Fact XXXI, on account that it must be supposed that an equitable adjustment of the flow of the river will be made between the United States and Canada and such flow regulated accordingly, and on account that same is largely a conclusion of law, and as such it does not state the law correctly.

XXXII. The converse situation from that suggested in the preceding paragraph may exist. So far as we are informed by this record, the Canadian Government, as sovereign or as a proprietor, might see fit to remove the crest of the rock dam on its side of the dividing wall, or widen and deepen the existing Canadian power canal, and thereby divert to the Canadian side a great part or even all of the water, leaving the Chandler-Dunbar submerged land no longer submerged.

The respondent, Chandler-Dunbar Water Power Company, did then and there except to all of Finding of Fact XXXII, on account that it must be supposed that an equitable adjustment of the flow of the river will be made between the United States and Canada and such flow regulated accordingly, and because it is not competent to proceed upon a proposition that the Canadian British Government will violate international rights.

495 XXXIII. The proposed structure, especially in connection with the proposed manufacturing plant built upon piers and covering a great part or all of the submerged land, would be an obstruction to the ice which comes down in the spring in enormous quantities and would tend to cause an ice jam or blockade, which might send the river over its banks, both in the United States and Canada, and might, for example, destroy the locks.

XXXIV. For about twenty years the Chandler-Dunbar Company, or its predecessors or some one claiming under it, has been developing power at this part of the rapids. This was accomplished by a short transverse dam near the lower boundary of its land extending out a short distance into the stream and then extending up along the bed of the stream (substantially) parallel to the bank up to the head of the rapids. This dam or wall, towards its upper end, diverged out into the stream the better to divert water into the head race and into the fore bay formed by its lower part. Earlier structures of this character were replaced about 1901 by those more extensive ones which existed when this condemnation was made. While considerable in extent and cost, they are inconsiderable as compared with the structures now proposed to utilize the whole power, and they were, comparatively speaking, along the bank rather than across the stream. Development of power thereby would be subject to some of the special objections and difficulties which have been noted, but to many, and perhaps the majority of such objections, it would not be subject, or, if subject thereto, would be so in a degree very much less than the proposed plan for entire development. From
496 year to year these developers have added to their investment relating to and depending thereon until such investment, at the time of this taking, amounted to approximately $500,000. The public lighting of the city of Sault Ste. Marie and the maintenance of various industries there were dependent on the power so developed. The United States itself, or contractors working on its public works, has, for some years, taken electric power from this source and paid therefor to these private parties.

To which Finding of Fact XXXIV the petitioner did then and there except, because such facts as are therein stated and found are not facts for judicial inquiry or finding, but are exclusively for the consideration and determination of Congress under the commerce clause in Article I, section 8, of the Constitution of the United States, Congress in section 11 of the act under consideration here having determined the necessity, such determination is final and binding on the court; and for the further reason that the undisputed testimony shows that all developments were made under revocable permits, and that values can not be built up in this proceeding against the Government by reason of any rights granted under permits which were revocable at the pleasure of the Secretary of War or of Congress, and Congress did not intend to create evidence to be used against the Government with any force whatever for the purpose of building up values for water power by authorizing, as it has, revocable permits to be issued to power companies to develop power in the river when their revocation should be ordered by Congress. It is not competent to so find in effect such fact and use said instruments as evidential of acquired vested rights against the Government by virtue thereof.

497 XXXV. About 1902, the Michigan-Lake Superior Power Company completed a canal from the waters above the rapids

to slack water below the rapids. The canal was designed to carry 32,000 c. s. f. as construed, it was capable of carrying that amount or more or less according to the fall permitted before reaching the power house. It has actually been carrying about 10,000 c. s. f., excepting when this flow has been temporarily diminished or stopped by the United States engineers when the Lake Superior level reached the determined minimum. Allied interests constructed, upon the Canadian side of the river, compensating works, originally supposed to divert from the Canadian to the American side as much water as was to be taken by this Michigan-Lake Superior Power Company Canal, but whether such compensating works had such effect is in dispute and is not shown by this record. Both Governments have, however, now for a long period of years, permitted 10,000 c. s. f. to be used for developing power through this channel, and it is the plan and expectation of the present officials of the War Department and the present engineering officers in charge of these works to permit 10,000 c. s. f. or more, of water to pass through this power canal under average conditions, and to receive payment therefor by way of a license or rental as contemplated by the act of March, 1909, with reference to surplus water.

To which finding of fact the petitioner did then and there except to so much as reads as follows: "And it is the plan and expectation of the present officials of the War Department and the present engineering officers in charge of these works to permit 10,000 c. s. f. or more of water to pass through this power canal under average conditions, and to receive payment therefor by way of a license or
498 rental as contemplated by the act of March, 1909, with reference to surplus water." For the reason that public policy forbids the inquiry by the court into the plans of the War Department, because such facts as are therein stated and found are not facts for judicial inquiry or finding, but are exclusively for the consideration and determination of Congress under the commerce clause in Article I, section 8, of the Constitution of the United States, Congress, in section 11 of the act under consideration here, having determined the necessity, such determination is final and binding on the court.

XXXVI. The plans and specifications approved by the War Department and the engineers, forming part of this general project and now in process of execution, provide for dams, cross and longitudinal, similar to those now in existence, but further out into the bed of the stream. By this structure, it is the plan and expectation of such department and of such officials, to develop water power for sale, pursuant to the provision of this act regarding surplus water.

The petitioner did then and there except to so much of Finding of Fact XXXVI as reads as follows: "The plans and specifications approved by the War Department and the engineers, forming part of this general project and now in process of execution, provide for dams, cross and longitudinal, similar to those now in existence, but further out into the bed of the stream. By this structure, it is the plan and expectation of such department and of such officials, to

develop water power for sale, pursuant to the provisions of this act regarding surplus water." For the reason that public policy forbids the inquiry by the court into the plans of the War Department and because such facts as are therein stated and found are not facts for judicial inquiry or finding, but are exclusively for
499 the consideration and determination of Congress under the commerce clause in Article I, section 8, of the Constitution of the United States, Congress, in section 11 of the act under consideration here, having determined the necessity, such determination is final and binding on the court.

XXXVII. The existing structures built by or under the Chandler-Dunbar Company are in connection with a tailrace excavated upon the below-lying public river bed, whereby there is, at the power house, a fall of 15 feet instead of only the 9-foot fall (effective) which exists on the Chandler-Dunbar property. The existing dam provided for and contemplated setting 9 wheels, each capable of developing under the 15-foot head 500 horsepower, making a total planned and partly executed development of 4,500 horsepower (electrical, equalling 6,500 theoretical). At the time of condemnation four such wheels had been set and were in use. Suitable wheels in the same location and under a 9-foot head would develop 225 horsepower (electrical) each.

The outer dike of the existing headrace extended to the second span of the bridge and was capable of diverting into the headrace, out of the supposed 60,000 c. s. f., substantially 6,500 c. s. f. The capacity of the four installed wheels under the existing condition of fall and tail race has been about 2,000 c. s. f., and the amount of water actually diverted through the Chandler-Dunbar headrace and works has for some time approximated, but has not exceeded, 2,000 c. s. f.

To which Finding of Fact XXXVII petitioner did then and there except, because such facts as are therein stated and found are not facts for judicial inquiry or finding, but are exclusively for the consideration and determination of Congress under the commerce
500 clause in Article I, section 8, of the Constitution of the United States, Congress, in section 11 of the act under consideration here, having determined the necessity, such determination is final and binding on the court.

XXXVIII. The proposed United States structures in the bed of the stream will deliver 7,500 c. s. f. (at stage 601.5) and will produce 12,700 horsepower under a 15-foot head or 7,500 horsepower under a 9-foot effective head (both theoretical).

To which Finding of Fact XXXVIII the petitioner did then and there except for the reason that public policy forbids the inquiry by the court into the plans of the War Department, and because such facts as are therein stated and found are not facts for judicial inquiry or finding, but are exclusively for the consideration and determination of Congress under the commerce clause in Article I, section 8, of the Constitution of the United States, Congress, in section 11 of the act under consideration here, having determined the necessity, such determination is final and binding on the court.

XXXIX. The permitted and contemplated diversion through the Michigan-Lake Superior Power Canal was, right or wrong, at first supposed not to diminish the flow of water through the rapids on the American side, and the amount of this diversion has been under continuous governmental control and has frequently been stopped entirely for considerable periods.

The respondent, Chandler-Dunbar Water Power Company, did then and there except to all of Finding of Fact XXXIX, on account that any supposition that the diversion of water into and through the Michigan-Lake Superior Power Canal was "not to diminish the flow of water through the rapids in the American side" was not
501 entertained after December of 1901, and on account that there is no evidence of any such supposition except the Chandler-Dunbar Water Power Company and no evidence of any such supposition on its part except the contents of the bill in equity in the action in the Circuit Court of Chippewa County, Michigan, wherein the Chandler-Dunbar Water Power Company was plaintiff and the Michigan-Lake Superior Company defendant, and such bill shows that such supposition had theretofore been entertained, but was no longer entertained.

XL. The amount seized or impounded by the Chandler-Dunbar Company's existing development is and will be surplus water not needed directly or indirectly for navigation, save by that species of constructive need with reference to which the facts have hereinbefore been found.

To which Finding of Fact XL the petitioner did then and there except, because such facts as are therein stated and found are not facts for judicial inquiry or finding, but are exclusively for the consideration and determination of Congress under the commerce clause in Article I, section 8, of the Constitution of the United States, Congress in section 11 of the act under consideration here having determined the necessity, such determination is final and binding on the court, and for the further reason that such finding is not supported by the testimony.

XLI. The amount of water sufficient to develop 6,500 horsepower (4,500 electrical) on the property of the Chandler-Dunbar Company—that is, on a 9-foot effective fall—is the proper figure to be taken in this connection. True, so much water in cubic second-feet has not yet been passed through the headrace, and could not be in its present form. Some enlargement of the head opening would be necessary, but the improvements were planned for this 6,500 horsepower, an investment was made and a business built up on such plan; the tailrace, which would allow this power to be developed with the greater head and the smaller amount of water, was permitted, and the
502 acquiescence of the Government agents and the public was in a plan which contemplated and called for so much water as might be necessary to develop 6,500 horsepower; and I think it was included in such plan that such development would be wholly upon the Chandler-Dunbar property if the tailrace privilege should not

be continued. This, then, justifies and calls for a finding which is, in form, a finding of fact, but which, as I view it, is only a question of drawing the proper legal inference from the various facts found, and, accordingly, I do find that water sufficient to develop 6,500 horsepower (theoretical) on the property of the Chandler-Dunbar Company is surplus water for which compensation should be assessed in this proceeding.

To which finding of fact the petition did then and there except because such facts as are therein stated and found are not facts for judicial inquiry or finding, but are exclusively for the consideration and determination of Congress under the commerce clause in Article I, section 8, of the Constitution of the United States; Congress in section 11 of the act under consideration here having determined the necessity, such determination is final and binding on the court; and for the further reason that the said finding of fact applies the doctrine of estoppal against the Government, and the Government cannot be estopped, nor is the issuance of revocable permits or the failure of the Government to stop and prevent the Chandler-Dunbar Water Power Company from making plans evidence to be used against the Government to build up values against it, and for the further reason that said finding is not supported by the testimony.

Said respondent, Chandler-Dunbar Water Power Company, did also then and there except to so much of Finding of Fact XLI, which is as follows: "The amount of water sufficient to develop
6,500 horsepower (4,500 electrical) on the property of the
503 Chandler-Dunbar Company—that is, on a 9-foot effective fall—
is the proper figure to be taken in this connection;" on account that said finding is contrary to all the evidence in the case, and on account that the undisputed evidence show that a very much larger flow of water is the proper figure to be taken in this connection, and it excepts to the same as a conclusion of law on account that such is not the law.

XLII. Such 6,500 horsepower has an annual value of $55,000; a present value of $550,000.

The petitioner did then and there except to such Finding of Fact XLII, because such facts as are therein stated and found are not facts for judicial inquiry or finding, but are exclusively for the consideration and determination of Congress under the commerce clause in Article I, section 8, of the Constitution of the United States; Congress in section 11 of the act under consideration here having determined the necessity, such determination is final and binding on the court.

The respondent, Chandler-Dunbar Water Power Company, did also then and there except to that clause of Finding of Fact XLII which reads as follows: "A present value of $55,000"; that is, to that part of the finding which holds that a water power which has an annual rental value of $55,000 has a present value of only $550,000—on account that the finding should be, as a matter of fact and a mat-

ter of law, that a property which has an annual rental value of $55,000 has a present value of $1,100,000.

XLIII. The upland along the rapids, comprising the Chandler entry, a part of Portage Street, and part of private land claim No. 3, has an independent value. It is preeminently fitted for a manufacturing site in connection with the water power to be developed. It also has value in connection with the probability that it would
504 be needed for lock and canal or bridge purposes. The value of this parcel is subject to many contingencies, but I fix the same as follows (including railroad sidetrack, buildings, and cable tunnel): For uses wholly disconnected with water power development or public improvement—that is to say, for all general purposes, like residences or hotels, factory sites disconnected with this water power, etc.—$20,000. This as the base value. For a factory site in connection with the proposed development of the entire water power, so as to use thereon or in connection therewith 30,000 horsepower or more, an additional value of $80,000, or a total of $100,000. For use as factory site in connection with the development of 6,500 horsepower, either as a single site or for several smaller factories to use the surplus of 6,500 horsepower not now used in the city, an additional value of $20,000, or a total value of $40,000. The fact that it was desirable for use for lock and canal or bridge purposes gives it an additional value element, in each case, of $25,000. The total value of this parcel for this proceeding should, therefore, be taken as $65,000.

The petition excepts to so much of Finding of Fact XLIII as reads as follows: "The upland along the rapids, comprising the Chandler entry, a part of Portage Street, and part of private land claim No. 3, has an independent value. It is preeminently fitted for a manufacturing site in connection with the water power to be developed. It also has value in connection with the probability that it would be needed for lock and canal or bridge purposes. The value of this parcel is subject to many contingencies, but I fix the same as follows. * * * For a factory site in connection with the proposed development of the entire water power so as to use thereon
or in connection therewith 30,000 horsepower or more, an ad-
505 ditional value of $80,000, or a total of $100,000. For use as factory site in connection with the development of 6,500 horsepower, either as single site or for several smaller factories to use the surplus of 6,500 horsepower not now used in the city, an additional value of $20,000, or a total of $40,000. The fact that it was desirable for use for lock and canal purposes gives it an additional value element, in each case, of $25,000. The total value of this parcel for this proceeding should, therefore, be taken as $65,000," because such facts as are therein stated and found are not facts for judicial inquiry or finding, but are exclusively for the consideration and determination of Congress under the commerce clause in Article I, section 8, of the Constitution of the United States; Congress, in section 11 of the act under consideration here, having determined the

necessity, such determination is final and binding on the court. And for the further reason that desirability for lock and canal purposes cannot be considered by the court in making up the award against the Government, and for the further reason that the necessities of the Government to have such property for lock and canal purposes, and to award value for the same on account of such necessity, is not a proper measure of value and is against public policy; and, further, that as to bridge purposes petitioner excepts for the reason that there is not a s'int*a*lla of evidence in the case that the location of bridge site on said property is contemplated by any one having power or authority to execute such a project. There is no existing act of Congress or any treaty with Great Britain contemplating the construction of a bridge across said river and which would erect its abutments on these premises. Further, because such bridge value is mere speculation and not within the zone of probability.

506 XLIV. The Portage Street subparcel is seven per cent in area of the whole parcel referred to in Paragraph XLIII, and is entitled to seven per cent of the values found in that paragraph. The fall appurtenant to this Portage Street parcel is two-tenths of a foot and is so insignificant as to be negligible.

XLV. Claims 95 and 96 front upon deep water above the head of the rapids. They have been used for wharfage for many years, and the wharf structures and the filling now located hereon and extending therefrom have cost, approximately, $12,000. On the submerged land appurtenant to them (or to the parts sold January 22nd, 1908, by the deed reserving all riparian rights) spoil from the lock work has been and is being dumped. It was part of the consideration for this quitclaim of 1908 by the Chandler-Dunbar Company that this fill and dump should be made by the United States, and the complete carrying out of this plan in good faith as then contemplated would have given a large frontage and a considerable area along the upper river supported by those two private claims. I fix the value of these two claims and the dump and fill, made, or which should have been made, all as one parcel, as follows: For general wharfage, dock, and warehouse purposes disconnected with the development of power in the rep*a*ids, and not in association with the land along the rapids (and as the base value), $10,000. By reason of its desirability for lock and canal purposes, an additional $10,000. In connection with the land along the rapids, if used as a part of the development of the 6,500 horsepower, an additional value of $5,000, or a total
507 of $25,000. To be used in association with the land along the rapids for the development of the entire 30,000 or more horsepower, a still additional value of $25,000, or a total of $50,000.

For the reasons stated the owners are entitled to the general purpose or base value plus the canal and lock value element, plus the 6,500 horsepower value element, making a total value of $25,000.

To which finding the petitioner excepts to so much as reads as follows: "Claims 95 and 96 front upon deep water above the head of the rapids. They have been used for wharfage for many years, and

the wharf structures and the filling now located thereon and extending therefrom have cost, approximately, $12,000. On the submerged land appurtenant to them (or to the parts sold January 22nd, 1908, by the deed reserving all riparian rights) spoil from the lock work has been and is being dumped. It was part of the consideration for this quitclaim of 1908 by the Chandler-Dunbar Company that this fill and dump should be made by the United States, and the complete carrying out of this plan in good faith as then contemplated would have been a large frontage and a considerable area along the upper river supported by those two private claims. I fix the value of these two claims and the dump and fill, made, or which should have been made, all as one parcel, as follows: * * * By reason of its desirability for lock and canal purposes, an additional $10,000. In connection with the land along the rapids, if used as a part of the development of the 6,500 horsepower, an additional value of $5,000, or a total of $25,000. To be used in association with the land along the rapids for the development of the entire 30,000 or more horsepower, a still additional value of $25,000, or a total of $50,000.

For the reasons stated the owners are entitled to the general
508 purpose or base value plus the canal and lock value element, plus the 6,500 horsepower value element, making a total value of $25,000." For the reason that payment of the consideration of the quitclaim deed of 1908 by the Chandler-Dunbar Water Power Company (if there was any valid and binding consideration beyond the amount therein named) could not be enforced in this proceeding, nor can the desirability of the property for lock and canal purposes be considered in this proceeding; nor can the value of said property as site for water-power development be considered or awarded against the Government.

XLVI. The value of the existing dike, now used as the outside wall of the head race to bring the water to the mill site in the existing development, is $16,524.

XLVII. Over practically the whole rapids, the thread of the stream or "thalweg" and the international boundary line are substantially coincident.

XLVIII. Litigation has been long pending and is still pending between the Chandler-Dunbar Company and the Michigan-Lake Superior Company. The former claims that whatever water goes through the power canal is unlawfully diverted from flowing over the Chandler-Dunbar subaqueous lands, and that this water must be restored in its natural channel; the latter disputes this claim for various reasons, and, among others, upon the ground of an alleged personal estoppel against the Chandler-Dunbar Company. Whatever water has gone and is going through the Michigan-Lake Superior Power Canal has been and is from the surplus above that necessary to produce the 6,500 t. h. p., and as to which surplus no compensation is awarded in this proceeding. The continuity of the frontage
509 is broken by the Portage Street parcel.

XLIX. The city of Sault Ste. Marie grew up on United States public land. Streets were laid out, and lots and parcels

enclosed and occupied without express authority. In 1850, Congress directed (9 U. S. S. L., 469) a survey and a plat to be made, and accordingly the Land Office made the Whelpley survey (approved September 4, 1855, by the surveyor general) 1. This indicated the streets, the private claims, the vacant lots, the Indian reservation, and the then (1855) existing canal grant. Apparently upon the supposition that Portage Street had been a de facto street, extending to the river before the canal property was granted and the canal built, this survey shows Portage Street continuing from the north bank of the canal to the south bank of the river, although such portion of the street was, upon the face of the map, inaccesible from the remainder of the street. Later, in 1879, pursuant to this survey, patent was granted to lot 3, described simply as "Lot 3." Still later, when the Chandler-Dunbar patent was granted, the land conveyed was described as bounded on the south by Portage Street, and particularly by a line which was, in fact, the northeast line of Portage Street.

The respondent, Chandler-Dunbar Water Power Company, did then and there except to that clause of Finding of Fact XLIX, which is as follows: "Later, in 1879, pursuant to this survey, patent was granted to lot 3, described simply as "Lot 3," on account that it is contrary to all the evidence in this case on that point, and on account that the patent to said lot 3, described the same as
510 being "according to the official plat of the survey of said lands returned to the General Land Office by the surveyor general;" and that the field notes of said village lot 3 for one boundary thereof are as follows: "North 77 degrees 10 minutes west along the south side of Portage Street to right bank River St. Mary."

L. The city never, in any manner, did anything indicating an acceptance of that portion of the street north of the canal, although on the south of the canal it improved and occupied the street in the usual manner. The part north of the canal has always remained wholly vacant and unoccupied, save for the occupation by the Chandler-Dunbar Company hereinafter mentioned. There never has been any acceptance by the city of this dedication.

LI. About 1887 a small building was erected, under the Chandler-Dunbar Company, upon that part marked on the map as Portage street. It was occupied by the Chandler-Dunbar Company's tenants until it burned, about 1907. There has been no specific enclosure of this street parcel along with the Chandler-Dunbar property, on either side or by itself. There has been no open, hostile, or adverse possession of this street parcel by the Chandler-Dunbar Company, except as in this paragraph stated.

LII. On application of William B. Cady to enter with Porterfield scrip that parcel of land north of the canal grant included within the lines of Portage Street, so-called, the Commissioner of the General Land Office decided that the fee title to such land had passed from the United States to the owners of the adjacent parcels, as more fully appears by the commissioner's published decision.

511 LIII. Pending this proceeding the International Bridge Company treated, by the petition herein, as the owner of the parcel described in paragraph 4a of the petition, has conveyed to the United States its title therein. The description found in paragraph 4a includes a parcel the acreage of which is .032 of an acre, and the value of which is $676. Of this included sub-parcel the Chandler-Dunbar Company is the owner of an undivided one-half.

LIV. The respondent, the Edison Sault Electric Company, at the time of taking by the Secretary of War of its leasehold interest, had a lease to it, its successors and assigns, from the respondent, Chandler-Dunbar Water Power Company, for and during the term of 80 years commencing on the first day of November, 1891, and terminating on the first day of November, 1871, of a piece of land of the said Chandler-Dunbar Water Power Company property, and situated in the city of Sault St. Marie, Michigan, bounded as follows: Beginning at a point on the east boundary of the said property, distant northerly four hundred (400) feet from the southeast corner of the said property; thence continuing northerly along said each boundary three hundred (300) feet; thence westerly at right angles to the said east boundary two hundred (200) feet; thence southerly parallel to the said east boundary three hundred (300) feet; thence easterly two hundred (200) feet to the place of beginning.

That of the property so as aforesaid taken, the said Edison Sault Electric Company, at the time of said taking, was the owner of cer-

512 tain constructions, viz, a power house and equipment with forebay and tail race appurtenant thereto, and certain railroad siding located on land controlled by said Edison Sault Electric Company, and rights in a tunnel and cables under the United States canal, with the extension thereof under the new canal being constructed, and the wires and cables and conduits and supports joined thereto and serving to convey the electric output of the power plant over and under the United States canal to the south boundary thereof, and also a complete distributing system located on Government property and on Chandler-Dunbar Water Power Company property, also five frame warehouses located on Chandler-Dunbar Water Power Company property.

The respondent, Edison Sault Electric Company, at the time of said taking, also owned and operated, in conjunction with its power house, a complete light and power distribution system, to wit, cables, wires, poles, transformers, lamps, meters, a sub-station site, and buildings and appurtenances required for a complete service of electric light and power to the city of Sault Ste. Marie, and the inhabitants thereof, which said distributing plant and system lying south of the St. Mary's Falls Canal was diminished in value by the taking of the leasehold interest, power house, and other property of said company lying north of said canal.

LV. Pending this suit, the Secretary of War and the Edison Sault Electric Company have entered into a contract of lease whereby the company will receive from the United States electric current for the

prosecution of the business of the company. The execution of this contract diminishes the loss in value which would otherwise result from the taking to the property of the Edison Sault Electric Company south of the canal.

513 LVI. The value of all the interests of the Edison Sault Electric Company in and appurtenant to the property described in the petition and taken by the United States is $300,000.

LVII. The deed of January, 1908, of Chandler-Dunbar Water Power Company, to United States, conveyed land valuable for canal and lock purposes. It is now in use for such purposes by the United States and covers six and fifty-two hundredths (6.52) acres. Said deed contained the following reservation and exception:

"The above described tract or tracts of land conveyed by this instrument, being indicated by the shaded portion appearing upon the plat thereof, thereto attached and hereby made a part of this deed and description; expressly excepting and reserving, however, from this deed and description all riparian rights now vested in said first party by virtue of the ownership of said land and which might, except for this reservation, pass to said second party by this conveyance; it being the definite intent and purpose of this exception and reservation to limit all rights hereby conveyed to within the boundary line given, to exclude from said conveyance the watercourse of the St. Mary's River outside the limits of the tract conveyed, and to reserve absolutely to said first party all riparian rights in the same full use and enjoyment as though this deed had not been given."

LVIII. The shore line of the said lands of which the Chandler-Dunbar Water Power Company was, at the time of the taking thereof and except for which taking, now is, the owner in fee simple of the entire estate, is over 3,000 feet in extent. And the shore line of the lands of which the Chandler-Dunbar Water Power Company was, at the time of the taking thereof, and except for such taking, now is, the owner of the undivided half, is over 250 feet in extent. The continuity of the frontage is broken by the Portage Street parcel.

514 LIX. The plans and specifications referred to in findings 36 and 38 contemplate a cross dam, including the present cross dam of the Edison Sault Electric Company, and extending about 200 feet further into the stream, substantially at right-angles with the flow, and a wing dam extending upstream therefrom about 2,000 feet, and the upper end of which will be in the stream about 1,000 feet from the shore. The contract had been made for the construction of such work, and such construction was progressing at the time of the trial. All the different plans which have been proposed for development, viz, (a) the first improvement by the Chandler-Dunbar Company, (b) that of the Edison Sault Electric Company adopted and executed about 1901, (c) that of the American Sault Paper Company projected in 1902 but not executed, (d) that of the United States now being executed, and (e) the plan presented

by the Chandler-Dunbar Company herein as its basis for computing values, are substantially of the same character and show the adoption of substantially the same method.

To which finding of fact the petitioner did then and there except, because such facts as are therein stated and found are not facts for judicial inquiry or finding, but are exclusively for the consideration and determination of Congress under the commerce clause in Article I, section 8 of the Constitution of the United States; Congress in section 11 of the act under consideration here having determined the necessity, such determination is final and binding on the court.

LX. The plan proposed by the Chandler-Dunbar Company for development as the basis of its claim of value in this case contemplated and provided for the passage of ice through the de-
515 velopment works. Such provision was sufficient for ordinary conditions.

The respondent, Chandler-Dunbar Water Power Company, did then and there except to that clause of Finding of Fact LX which is as follows: "Such provision was sufficient for ordinary conditions," on account that the uncontradicted evidence show that such works were sufficient for the passage through them of ice without limitation to "ordinary conditions" and were safe for any conditions to be reasonably anticipated.

LXI. The cross dam, built in 1901 and used by the Edison Sault Company, extended in to the river a distance of about 400 feet beyond the meander line.

LXII. (a) The largest volume of freight which has passed through the American and Canadian Canals in any one year was 62,000,000 tons in the year 1910.

(b) The largest volume of freight now anticipated as proper to be provided for is 200,000,000 tons per year.

(c) The volume of flow of 4,000 c. s. f. would provide for the passage of 1,000,000,000 tons of freight per annum, according to present methods, and for all forest products now passing.

The petitioner excepts to so much of Finding of Fact LXII as reads as follows: "(b) The largest volume of freight now anticipated as proper to be provided for is 200,000,000 tons per year; (c) the volume of flow of 4,000 c. s. f. would provide for the passage of 1,000,000,000 tons of freight per annum, according to present methods, and for all forest products now passing," because such facts as are therein stated and found are not facts for judicial inquiry or finding,
but are exclusively for the consideration and determination of
516 Congress under the commerce clause in Article I, section 8, of the Constitution of the United States; Congress in section 11 of the act under consideration here having determined the necessity, such determination is final and binding on the court.

LXIII. If controlling works were constructed across the channel and were so used as to equalize, as far as possible, the outflow of Lake Superior, they would increase the amount of flow in the low-water period, and so increase the amount of power then to be derived

therefrom; but they would decrease the amount of flow at the high-water period and diminish the amount of power which could then be produced. If such works were used to maintain the level of Lake Superior as perfectly as possible they would tend to diminish the power to be derived at low-water periods.

LXIV. The land of the Chandler-Dunbar Company herein taken, upland and submerged, forms the most available site for such controlling works, and the most available site for another international bridge anywhere between Lakes Superior and Huron.

To which Finding of Fact LXIV the petitioner did then and there except for the reason that there is no testimony to support the same, and no testimony that the construction of another international bridge at Sault Ste. Marie is within bounds of sufficient probability to give to said lands any value by reason of such probability.

LXV. The compensating works referred to in finding 35 consist of a dam at the head of the rapids extending out from the Canadian side substantially to the international boundary line and provided with gates so as to permit the passage of more or less water
517 through the dam or over the same as desired.

LXVI. Island No. 5 is situated in the American edge of the rapids, below the Chandler-Dunbar property and opposite that part of the shore already belonging to the United States.

It contains about one-third of an acre in area. Its length, up and down the stream, is 175 feet, and the amount of fall between the upper and the lower boundary lines extended to the thread of the stream is two feet. In appurtenant, submerged land is a shoal which prevents the development of a 15-foot head upon the upstream site most suitably available therefor, but which would not interfere with the development of a 9½ effective head at the lower edge of the Chandler-Dunbar property. The United States owns the bed of the stream to the thread intervening between the Chandler-Dunbar Company property and Island No. 5.

LXVII. Additional excavation upon the submerged land appurtenant to Island No. 5 would permit the entire river front property and the water power to be developed as a unit, and the entire property, as a unit for such development, would be worth $50,000 more than if the rights appurtenant to Island No. 5 were not included in such unit. This finding refers to the use of the 6,500 c. s. f. elsewhere considered as entitling the Chandler-Dunbar Company to compensation therefor.

LXVIII. An ejectment suit is pending, brought by the United States and defended by the St. Mary's Falls Power Company, in which suit the United States claims, and for many years has
518 claimed, to be the owner in fee of Island No. 5, and unless such claim is right the St. Mary's Falls Power Company is the owner in fee thereof.

LXIX. Nothing has ever been done by anyone looking to the development of power, directly or indirectly, opposite Island No. 5.

No power could be commercially developed out of the two-foot fall appurtenant to the island, if such fall is not united with any other.

LXX. The value of Island No. 5 is as follows:

(a) As a base value for general purposes, as for a cottage or a fishing station, $1,000.

(b) As a strategic value growing out of the extent to which it may control or block the most available development by upstream owners, $15,000.00

(c) As an additional value by reason of its special suitability for lock or canal purposes, $5,000.

(d) If it should be held that the riparian owners are entitled to compensation for water power above the 4,000 c. s. f. estimate, and above the 6,500 c. s. f. allowance, then the value of such excess water power appurtenant to Island No. 5 is ten per cent of that to be fixed for the similar rights of the Chandler-Dunbar Company.

The petitioner did then and there except to so much of Finding of Fact LXX as reads as follows: "(b) As a strategic value growing out of the extent to which it may control or block the most available development by upstream owners, $15,000. (c) As an additional value, by reason of its special suitability for lock or canal purposes, $5,000. (d) If it should be held that the riparian owners are entitled to compensation for water power above the 4,000 c. s. f. estimate, and above the 6,500 c. s. f. allowance, then the value of such excess water power appurtenant to Island No. 5 is ten per cent of that to be fixed for the similar rights of the Chandler-Dunbar
519 Company," for the reason that a strategic value would be a hold-up value and also has reference to water power, and no water-power value can be awarded against the Government, and for the further reason that the value of the property for lock and canal purposes can not be considered by the court in this proceedings, as such value would be measuring the necessities of the Government.

St. Mary's River Power Company did then and there except to so much of Finding of Fact LXX as reads as follows: "(d) If it should be held that the riparian owners are entitled to compensation for water power above the 4,000 c. s. f. estimate, and above the 6,500 c. s. f. allowance, then the value of such excess water power appurtenant to Island No. 5 is 10% of that to be fixed for the similar rights of the Chandler-Dunbar Company," for the reason that the fall appurtenant to Island No. 5 is two feet substantially as compared with the fall substantially appurtenant to the Chandler-Dunbar lands of ten feet substantially, and therefore the percentage of allowance should be on the basis of two-tenths instead of one-tenth.

LXXI. All the development works ever constructed upon the Chandler-Dunbar submerged lands by anyone have been constructed after obtaining from the Secretary of War a permit therefor, and each such permit has been expressly revocable by right of revocation reserved on its face, to be exercised with or without cause. Each such permit was revoked before the commencement of this proceeding.

The respondent, Chandler-Dunbar Water Power Company, excepts to Finding of Fact LXXI, on account that the same does not state that the power to revoke permits was reserved to the Secretary of War exclusively, as the proofs show the fact to be.

LXXII. On January 1st, 1910, the United States took and has since maintained exclusive possession over the property involved, excepting the intangible water power rights, and has since that date deprived the former owners of all beneficial use. As to the water power rights, the only existing use beneficial to the owner consisted of the rentals accruing under the lease from the Edison Sault Company. Of these, the United States has never up to this time taken possession, but the rentals have continued during this proceeding and are continuing to be paid or to accrue to the Chandler-
520 Dunbar Company. By the arrangement made, pending this proceeding, between the Edison Sault Company and the representatives of the United States, a lease of the rent producing water power is to be made by the United States to the Edison Sault Company, and the United States is to become the landlord and only upon the completion of this proceeding by payment into court of the awards made to the Chandler-Dunbar Company and the Edison Sault Company, and until that time the Chandler-Dunbar Company is to continue to receive the rentals accruing under the previously existing lease.

And now comes the respondent, the Chandler-Dunbar Water Power Company, and excepts to the refusal of the court to find facts requested by it, as follows:

1. The Chandler-Dunbar Water Power Company was, at the time of the taking thereof by the United States, through the Secretary of War in 1909, and except for such taking is now the owner of so much of Portage Street as is included in said petition under the designation of "Second description" and "Third description," together with the riparian rights appurtenant thereto, containing 1.326 acres, more or less.

The court refused to find the fact as so requested, and thereupon counsel for said respondent duly excepted to such refusal on account that such fact was proven by undisputed record evidence and on account that such fact is material to said respondent's claim.

2. The patent to William Chandler of the part of so-called Indian reserve involved in this case, describes the land as bounded by the "St. Marys Falls Canal and Portage Street extended on the south." The patent of village lot three grants the lot with others "according to the official plat of the survey of said lands, returned
521 to the General Land Office by the surveyor general" and the field notes of said village lot three for one boundary thereof, read "North 77 degrees 10 minutes west along the south side of Portage Street to right bank River St. Mary."

The court refused to find the fact as so requested and thereupon counsel for said respondent duly expected to such refusal on account

that such fact was proven by undisputed record evidence and on account that such fact is material to said respondent's claim.

3. The same (the Michigan Lake Superior Power Company's Canal) is built for water-power purposes and the capacity of the same is to take and use for power fully 20,000 c. s. f.

The court refused to find the fact as so requested and thereupon counsel for said respondent duly excepted to such refusal on account that such fact was proven by undisputed evidence and that such fact is material to such respondent's claim.

4. Remedial works in the channel of the river sufficient to compensate for the withdrawal of that amount (20,000 c. s. f.) of water from the river might be constructed at comparatively inconsiderable expense. Same would probably be (almost necessarily be) part of any remedial works to control the outflow of Lake Superior.

The court refused to find the fact as so requested, and thereupon counsel for said respondent duly excepted to such refusal on account that such fact is shown by undisputed testimony and maps showing the entire physical conditions, and on account that such fact is material to said respondent's claim.

5. The plans proposed by the Chandler-Dunbar Water Power Company for the development and control of the water power sufficiently provide for the passage of ice through the same.

The court refused to find the fact as so requested, and there-
522 upon counsel for said respondent duly excepted to such refusal by its counsel.

6. The Chandler-Dunbar Water Power Company, after the development of power, as shown by Finding XXXIV, formulated a plan for a very much larger development, which plan involved the building of a cross dam to extend further into the stream and to take in about 9,777 c. s. f. of the flow, the additional power to be used by the American Sault Paper Company to operate a paper and pulp mill. This plan was partially carried out to the extent of making several contracts, but did not extend to the doing of any actual work in excavation or construction in the bed of the stream.

The court refused to find the fact as so requested, and thereupon counsel for said respondent duly excepted to such refusal on account that such fact was proven by undisputed testimony and documents and that such fact was material to said respondent's claim.

7. Both the United States and the Dominion of Canada desire the construction of controlling works in the St. Marys River in order to control the outflow from Lake Superior in the interest of navigation.

The court refused to find the fact as so requested and thereupon counsel for said respondent duly excepted to such refusal on account that such fact was proven by legislation and official action of both countries, and the actual building of remedial works by Canada, as shown by undisputed testimony and maps, and on account that such fact is material to said respondent's claim.

8. Under conditions existing at the place of taking at the time of the taking and considering present methods of navigation, it seems

probably quite certain that a very large ratio of the water power at the Sault might be made available without any interference with, or diminution of facility for, navigation by mutually advantageous business combination and concession between the parties interested in the navigation and the power.

The court refused to find, excepting as covered by Findings XX and XXI, the fact as so requested, and thereupon counsel for said
523 respondent duly excepted to such refusal on account such fact is shown by the physical conditions shown to exist and as understood by all parties to exist, and on account that such fact is material to said respondent's claim.

9. The proper measure to be taken herein as the flow of the River St. Marys at the Falls is 75,000 cubic feet per second.

The court refused to find the fact as so requested and thereupon counsel for said respondent duly excepted to such refusal on account that such fact was clearly proven by undisputed record evidence and on account that such fact is material to said respondent's claim.

COUNSEL FOR THE GOVERNMENT. We desire to now file and submit a motion to eliminate water-power values from the award notwithstanding the findings of fact which the court has announced and filed. The reasons and grounds of the motion will be found stated in the motion.

The COURT. You may do so.

Thereupon said motion was filed and argued before the said court and after said argument—

The COURT. This motion may be overruled for the reasons stated upon the trial, and to be stated in the opinion which will later be filed.

To which holding of the court overruling said motion the Government by its counsel did then and there except.

The COURT. A journal entry may be made overruling this motion, and the Government may have its exception, and if the Gov-
524 ernment desire it may file written exception to such journal entry.

COUNSEL FOR THE GOVERNMENT. We will do so. We now desire to file and submit to the court a motion to eliminate water-power values from the award to the Chandler-Dunbar Water Power Company property for the reason that the said land is entirely surrounded by Government land and there is no way of necessity to or from said lands over Government land in favor of said company. The grounds and reasons of said motion appear therein.

The COURT. You may file said motion and submit it to the court.

Thereupon said motion was argued by the counsel for the respective parties, and after such argument—

The COURT. This motion may also be overruled, for the reasons stated and to be stated in the opinion, and if the Government desire it may file written exceptions to such journal entry.

Thereupon counsel for the Government did then and there except to such holding of the court overruling said motion.

The COURT. A journal entry may be made overruling this motion, and the Government may have its exception.

Thereupon counsel for St. Mary's Power Company presented the requests for findings of fact which are on file, and the court announced that in so far as the same had not been embodied in the general findings of fact they were, and each of them was, refused. Thereupon counsel for St. Mary's Power Company excepted separately to the refusal of or modification of each of its requests for findings which was not granted, for the reason that the uncontradicted evidence required that each of such requests should be granted as proposed.

584 GOVERNMENT'S EXHIBITS.

Gov't Ex. 7.—Whelpley survey; a portion of it applying to these premises.

11a.—Two documents from this exhibit: #29, lis pendens; #26, deed of Jan. 22, 1908.

Abstract #26.

Chandler-Dunbar Water Power Company to United States of America.

Received for record the 18th day of Feb., A. D. 1908, at 3.00 p. m. Liber 67 of deeds, pages 54 and 55.

OTHIE L. SMITH,
Deputy Register of Deeds.

QUITCLAIM DEED.

This indenture, made the 22nd day of January in the year of our Lord one thousand nine hundred and eight, between the Chandler-Dunbar Water Power Company, a corporation, having its principal office at the city of Sault Ste. Marie, Chippewa County, State of Michigan, of the first part, and the United States of America, of the second part.

585 Witnesseth, that the said party of the first part, for and in consideration of the sum of one dollar ($1.00) to it in hand paid by the said party of the second part, the receipt whereof is hereby confessed and acknowledged, does by these presents grant, release, and forever quitclaim unto the said party of the second part, and to its assigns forever, the following described real estate situated in the city of Sault Ste. Marie, in the county of Chippewa and the State of Michigan:

All those certain pieces and parcels of land, situate in the city of Sault Ste. Marie, county of Chippewa, and State of Michigan, form-

ing parts of private land claims numbers ninety-five (95), number ninety-six (96), north part of claim number three (3), northeast part of claim number three (3), part of claim number four (4), part of claim number five (5), part of village lot number three (3), and part of the Indian reservation, described as follows, to wit:

Beginning at the intersection of the north boundary line of the canal grant (under act of Congress approved August 25, 1852) with the principal meridian of Michigan, thence along said boundary line of said canal grant, as determined by the Whelpley survey of 1854–5, north eighty-five degrees, twenty-three minutes, east (N. 85° 23′ E.) two thousand four hundred and forty-nine and twenty-six hundredths feet (2,449.26′) to the easterly boundary of the lands claimed by the Chandler-Dunbar Water Power Company, thence south eighty-nine degrees forty minutes, twenty-one seconds west (S. 89° 40′ 21″ W.) one thousand eight hundred and twenty-one and fifty hundredths (1,821.50 ft.) thence south eighty-five degrees twenty-three minutes west (85 23′ W.) five hundred and fifty-seven and one-tenths feet (557.1 ft.), thence south eighty-nine degrees,
forty minutes, twenty-one seconds west (S. 89 40′ 21″ W.)
586 six hundred and one and ninety-one hundredths feet (601.91 ft.) to the westerly boundary of claim ninety-five (95), thence along the westerly boundary line of said claim south forty-five degrees thirteen minutes west (S. 45 13′ W.) ninety-five and fourteen hundredths feet (95.14 ft.), thence south seventy-four degrees fifty-four minutes east (S. 74 54′ E.) two hundred and seventy-six and fifty-four hundredths feet (276.54 ft.), thence south eighty-seven degrees sixteen minutes east (S. 87 16′ E.) two hundred and seven and nine-tenths feet (207.9), thence north eighty-five degrees twenty-three minutes east (N. 85 23′ E.) one hundred and thirty and sixty-eight hundredths feet (130.68 ft.) to the place of beginning, containing six and fifty-two hundredths (6.52) acres, more or less.

The above described tract or tracts of 1 and conveyed by this instrument being indicated by the shaded portion appearing upon the plat thereof, hereto attached and hereby made a part of this deed and description, expressly excepting and reserving, however, from this deed and description all riparian rights now vested in said first part by virtue of the ownership of said land, and which might, except for this reservation, pass to said second party by this conveyance, it being the definite intent and purpose of this exception and reservation to limit all rights hereby conveyed to within the boundary lines given, to exclude from said conveyance the water course of the St. Marys River outside the limits of the tract conveyed and to reserve absolutely to said first party all riparian rights in the same full use and enjoyment as though this deed had not been given.

Anything which might be inferred from the language of this
587 deed to the contrary notwithstanding, this deed shall stand as a conveyance of the herein described premises only.

And the giving and the acceptance thereof and acting thereunder shall be without prejudice to any claim of grantee or grantor to or respecting any matter or thing outside of the boundary lines thereof.

In accepting this deed the United States does not admit that any title now exists in the grantor to the uplands herein granted, or that any riparian rights exist in the bed of the adjacent waters, of the St. Marys River. And it is agreed that the United States is not in anyway by this deed estopped or limited in its power or rights in relation to any litigation now pending between the Government of the United States and the Chandler-Dunbar Water Power Company, or in relation to any question therein arising, or in any other litigation which may hereafter be commenced by or against it, in respect to such subject matter.

To have and to hold the said premises to the said party of the second part, and to its assigns, to the sole and only proper use, benefit, and behoof of the said party of the second part, its assigns, forever.

In witness whereof, the said party of the first part has pursuant to resolution of its stockholders and directors, duly adopted, caused these presents to be signed and acknowledged by its president and countersigned and acknowledged by its secretary and its corporate seal to be hereto affixed the day and year first above written.

THE CHANDLER-DUNBAR WATER POWER CO.,
A corporation, [L. S.]
By WILLIAM CHANDLER, *Its President, and*
By DANIEL B. SOUTH, *Its Secretary.*

Signed, sealed, and delivered in presence of—
GEO. W. BALDWIN,
SHERMAN T. HANDY.
[CORPORATE SEAL.]

588 STATE OF MICHIGAN,
County of Chippewa, ss:

On this 22nd day of January, in the year one thousand nine hundred and eight (1908), before me, a notary public in and for said county, personally appeared the above named William Chandler, president, and Daniel B. South, secretary, of said Chandler-Dunbar Water Power Company, known to me to be the persons who as officers of said company executed the foregoing instrument and who severally acknowledged the same to be their free act and deed, and the free act and deed of said Chandler-Dunbar Water Power Company, acting through them as its proper officers.

I further certify that I know the corporate seal of said Chandler-Dunbar Water Power Company and that the seal affixed to said foregoing instrument is the corporate seal of said company.

[NOTARIAL SEAL.] SHERMAN T. HANDY,
Notary Public, in and for Chippewa County, Michigan.

My commission expires November 16, 1908.

Abstract #29′.

11b.

State of Michigan, Circuit Court for Chippewa, County, inc. chancery.

589 THE CHANDLER-DUNBAR WATER POWER COMPANY
vs.
THE MICHIGAN-LAKE SUPERIOR POWER CO.

Received for record the 27th day of October, A. D. 1902, at 10 o'clock a. m. Liber 2, notice of lis pendens, page 135.

MAMIE A. HOWELL,
Dep'y Register of Deeds.

LIS PENDENS.

State of Michigan, in the Circuit Court for the County of Chippewa, in chancery.

THE CHANDLER-DUNBAR WATER POWER COMPANY, complainant,
vs.
THE MICHIGAN-LAKE SUPERIOR POWER COMPANY, defendant.
} Lis pendens.

To whom it may concern:

Notice is hereby given that the foregoing action, now pending in the Circuit Court of Marquette County, Michigan, on change of venue, was commenced in the Circuit Court of Chippewa County, Michigan, on the complaint of the complainant, hereinbefore filed in the office of the clerk of the court of Chippewa County, but now on file in the office of the clerk of the Circuit Court of Marquette County.

That the object of such action is to secure adjudicatio, that the plaintiff is the owner of the water power furnished by the flow
590 and fall of that part of the water of the St. Marys River appurtenant to the south or American shore of said river at the rapids in the city of Sault Ste. Marie, on, over, and against the lands of the complainant, extending "from a point a long distance, about 700 feet above and west of, to a point a long distance, about 2,300 feet below and east of the south end of the international bridge across the said St. Marys River at the city of Sault Ste. Marie," and that the complainant has the right to use the flow of the waters of said river appurtenant to the south or American shore, where the same flows past and over the lands above described, for the purpose

of hydraulic power, without let or hindrance of or from the defendant, and to secure a decree of the court restraining the defendant, its agents, and employees from diverting any of the waters of the St. Marys River appurtenant to the south or American shore thereof, from the said river above the lands and hydraulic works of the complainant and carrying the same around such lands and hydraulic works, through the canal of the defendant, the Michigan-Lake Superior Power Company, built by it in the city of Sault Ste. Marie, County of Chippewa, Michigan.

Dated October 24, 1902.

A. B. ELREDGE,
Solicitor for Complainant.
(Business address: Marquette, Michigan.)

Ex. 16¼.—Illustrating map. Big one. Used in court room.

592 GOV'T EXHIBIT 14.—3rd description of petition.

Abstract #1.

Confirmed to the city of Sault Ste. Marie, Michigan, under the provisions of the act of Congress approved Sept. 26th, 1850 (9 Stat., 469), entitled "An act providing for the examination and settlement of claims to land at Sault Ste. Marie, Michigan, as designated on the connected plat of survey made by Thomas W. Whelpley in 1854, and approved Sept. 4th, 1855, by the surveyor general at Detroit, Michigan."

I certify that the above map of the village of Sault Ste. Marie, Michigan, with the private claims and other surveys represented thereon, is strictly conformable to the field notes of the survey thereof now on file in this office which have been examined and approved.

LEANDER CHAPMAN,
Surveyor General.

SURVEYOR GENERAL'S OFFICE,
Detroit, Sept. 4th, 1855.

593 GOV'T EX. 27.—Tabulation of annual reports to the secretary of state of Chandler-Dunbar Water Power Company; also tabulation of taxes of Chandler-Dunbar's real estate.

594 Chandler Dunbar Water Power Co.	1892	1895	1896	1897	1901	1904	1905	1906	1908
Capital stock	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000
Capital paid in	150,000	150,000	150,000	150,000	150,000	Property. 150,000	150,000	150,000	150,000
Real estate	126,000	130,000	150,000	150,000		150,000			
Personal estate	1,500	1,500	1,500	1,500		80,000 Value.			
Debits	4,500				3,282.87	11,808.30	19,325.16 Expenses.	29,977.74 Expenses.	33,305.78
Credits	18,000	2,979.19	1,988.73	1,766.89					
Length of stream improved					¼ mile.				
Cost of improvement					53,910.25		53,926.05	53,926.05	53,926.05
Amount expended					69,428.41		84,294.81	86,925.84	91,148.65
Capital expended					150,000				
Earnings expended on improvements					23,698.31		23,956.05	23,992.44	23,964.63
Amount received from earnings					7,018.00		8,392.01	8,392.00	12,786.63
Amount set aside for repairs					2,861.62				

595 That part of a lot, known as Indian reservation, lying north of St. Marys Falls Ship Canal in sec. 6, T. 47 N., R. 1 E., containing 9 10 3/4/100 acres; also all that part of p. l. c. No. 3 lying north of St. Marys Falls Ship Canal, except right of way of Bridge Co.; also all of p. l. c. #95; also all of p. l. c. #96; also all village lot #3 except a piece off the west end belonging to the Sault Ste. Marie Bridge Co.

Above description assessed in name of Chandler-Dunbar Water Power Co.

596

Year.	Page tax roll.	Valuation.
1897	185	$50,000.00
1898	186	60,000.00
1899	189	100,000.00
1900	194	85,000.00
1901	186	85,000.00
1902	186	85,000.00
1903	186	85,000.00
1904	188	85,000.00
1905	192	85,000.00
1906	188	60,000.00
1907	180	60,000.00
1908	179	75,000.00
1909	179	75,000.00

Govt. Ex. 28.—Protest of Chandler-Dunbar Company against assessment of 1898.

To the board of review of the city of Sault Ste. Marie:

The undersigned, the Chandler-Dunbar Company, owner of the following described pieces or parcels of land, viz, the Indian reservation, so called, north of the St. Marys Falls Ship Canal, private land claims 95 and 96, and those portions of private land
597 claims 3, 4, and 5 lying north of the St. Marys Falls Ship Canal, excepting that portion thereof owned and occupied by the International Bridge Company, protests against the assessment of $75,000.00 made by the comptroller of the city of Sault Ste. Marie upon said property on the assessment roll for the year 1898, and alleges that said assessment is excessive and more than the actual cash value of said property.

It therefore prays that said assessment be reduced from the said sum of $75,000.00 to the sum of $50,000.00, at which amount said property was was assessed on the assessment roll of 1897.

Your petitioner avers that there has been no change in said property by way of improvement or otherwise since the assessment made in 1897. It avers that the cash value of said property is not to exceed $50,000, and in support of said application files herewith the annexed affidavit.

Dated Sault Ste. Marie, Mich., May 23rd, A. D. 1898.

CHANDLER DUNBAR CO.,
By OREN & WEBSTER, *Its Atty's.*

STATE OF MICHIGAN,
County of Chippewa, ss:

W. F. KINGAN, being duly sworn, upon his oath deposes and says that he is well acquainted with the property of the Chandler-Dunbar Company; that said property, together with all improvements upon the same, is not worth, at a cash value, to exceed $50,000.

W. F. KINGAN.

Subscribed and sworn to before me this 23rd day of May, A. D. 1898.

H. M. OREN,
Notary Public, Chippewa Co., Mich.

598 Gov't Ex. 35.—Notice filed by Secretary of War of intention to take property.

NOTICE.

To whom it may concern:

Pursuant to the provisions of paragraphs one and two of section eleven of the act of Congress entitled "An act to provide for the repair, maintenance, and preservation of public works on rivers and harbors, and for other purposes," approved March 3rd, 1909:

Notice is hereby given that I, Jacob M. Dickinson, Secretary of War, do proceed in accordance therewith by the filing of this notice in the register of deeds office of Chippewa County, Michigan, to take the lands and property situate in Chippewa County, Michigan, hereinafter described which it is necessary for the United States to take and own in fee simple absolute in execution of the provisions of said section 11 for the proposed aiding, facilitating, and improving the navigation of the waters of St. Marys River, the same being connecting waters in the system of the Great Lakes, all being public waters in the United States, and in the establishment, construction, and maintenance and operation of suitable canals and locks and the appurtenant public works necessarily incident thereto and the exclusive control over the same for the purpose of said navigation as now provided by Congress.

Said lands are described as follows:

599 All those tracts or parcels of land north of the St. Marys Falls Canal described as follows:

First description: All that part of private land claims Nos. 95 and 96 lying north of the northern boundary of the United States canal lands and described: Beginning at the intersection of the principal meridian of Michigan and the northern boundary of the United States canal lands, being 138.25 feet north of the intersection of the aforesaid principal meridian with the northern boundary of the United States canal grant; thence south 89° 40′ 21″ west, along said boundary of the United States canal lands 327.73 feet to the southeast corner of said tract, and the initial point of this description;

thence north 41° 27′ west 214.96 feet to the north corner of claim No. 96; thence south 48° 33′ west 165 feet; thence south 44° 47′ east 33 feet to the north corner of claim No. 95; thence south 45° 13′ west 43.46 feet; thence north 89° 40′ 21″ east 274.18 feet to the place of beginning, containing .56 acre, more or less.

Together with all riparian and other rights appurtenant thereto, including all structures and appurtenances of every kind and description, out to the international boundary line; and all rights that may have been reserved in previous deeds conveying a portion of all of these claims to the United States.

Second description: All that tract of land lying north of the northern boundary of the United States canal lands, including parts of village lot No. 3, Portage Street, and the Indian reservation, the same being more particularly described by courses and distances as follows: Beginning at the intersection of the principal meridian of Michigan with the meander line of St. Marys River, being 59.4 feet north of the northern boundary of the United States canal grant; thence north 71° 39′ east 264 feet; thence north 4° 37′ west 240.9 feet to the northwest corner of said tract and the initial point of this description; thence south 4° 37′ east 226.55 feet; thence north 85° 23′ east 275.93 feet; thence north 89° 40′ 21″ east 1,821.5 feet; thence north 18° 39′ west 136.96 feet; thence north 80° 40′ west 109.56 feet; thence south 88° 15′ west 264.66 feet; thence north 84° 41′ west 267.96 feet; thence south 85° 23′ west 198 feet; thence north 89° 54′ west 264.66 feet; thence south 79° 57′ west 265.32 feet; thence north 69° 19′ west 291.72 feet; thence south 87° 56′ west 533.94 feet to the place of beginning, containing 8.3 acres, more or less.

Together with all riparian and other rights apurtenant thereto, including all structures and appurtenances of every kind and description, out to the international boundary line; and all rights reserved by the Chandler-Dunbar Water Power Company in deed dated January 22, 1908, conveying to the United States of America certain lands north of the St. Marys Falls Canal.

Third description: All that tract or parcel of land lying north of the St. Marys Falls Canal, designated as Portage Street,
600 and described as follows: Beginning at the intersection of the principal meridian of Michigan and the northern boundary of the United States canal grant; thence north 85° 23′ east 1,202.52 feet along said boundary line to its intersection with the northern line of Portage Street, the initial point of this description; thence north 77° 10′ west 990 feet; thence south 4° 37′ east 69.3 feet; thence south 77° 10′ east 759 feet; thence north 85° 23′ east 219.78 feet to the place of beginning, containing 1.326 acres, more or less.

Together with all riparian or other rights appurtenant thereto, including all structures and appurtenances of every kind and description, out to the international boundary line.

Fourth description: All that part of village lot No. 3, described as follows: Beginning at the intersection of the principal meridian of Michigan and the meander line of the St. Marys River, according to

the so-called Whelpley survey of 1854–1855, being 59.4 feet north of the northern boundary of the United States canal grant; thence north 71° 39′ east 70.2 feet to the west corner of said tract, and the initial point of this description; thence south 84° 15′ 38″ east 49 feet; thence north 82° 6′ 59″ east 40.7 feet; thence north 14° 3′ east 32.44 feet; thence south 71° 39′ west 102.14 feet to the place of beginning, containing .032 acre, more or less.

Together with all riparian and other rights appurtenant thereto, including all structures and appurtenances of every kind and description, out to the international boundary line.

Fifth description: All rights to a strip 100 feet wide 50 feet on each side of the center line of the route adopted by Sault Ste. Marie Bridge Company, from the meander line of St. Marys River to a point in the said center line and distant 700 feet, measured on said center line from the north side of the St. Marys Falls Ship Canal as it existed in 1887. The center line of the route of said company has a course north 14° 3′ east, and passes through a point in the meridian line of the State of Michigan distant 61.85 feet north from the north line of Portage Avenue (formerly known as Canal Street), in the city of Sault Ste. Marie.

Sixth description: A certain island near the foot of St. Marys Falls, on the American side, and known as the island of Chief Shawano, and being the same ceded to Chief Shawano by the United States Government and designated by Whelpley survey as Island No. 5, containing .361 acre, more or less.

Together with all riparian or other rights appurtenant thereto, including all structures and appurtenances of every kind and description, out to the international boundary line.

All the above-described lands and property and rights appendant or appurtenant thereto I shall take immediate possession of in
601 the name of the United States, and intend to enter the same and hold possession thereof, and shall proceed at once with such public works thereon as have been authorized by Congress for the uses of navigation of the St. Marys River aforesaid and the said canals and locks forming, as they do, the connecting waters as aforesaid.

In reference to the taking possession of Island No. 5, known as Chief O'Shaw-waw-no's island hereunder, pursuant to the provisions above quoted and the filing of this notice and the publication hereof, including said Island No. 5, it is not intended to abandon or waive the right of the United States to the said Island No. 5 as the present owner in fee thereof, but solely to take and dispossess any actual occupant who may be thereon, and not to acknowledge or concede in any manner that any one but the United States owns the same in fee simple or has any rights thereon, or that any actual occupant thereon is any other than a trespasser, and it is not intended that any other or different construction shall be given to this act of the United States or the subsequent taking of possession relating to

said Island No. 5 in any litigation now pending relating to the title to said Island No. 5.

This notice has been heretofore given, and this paper is supplemental thereto and in correction thereof.

J. M. DICKINSON,
Secretary of War.

NOVEMBER 29, 1909.

602 Gov't Ex. 38.—Notice to Edison Sault Company revolking permits of Aug., 1892; April, 1901; March, 1903; July, 1903; May, 1905, to construct and maintain works, structures, etc., in the river.

J. A. G. O. (10045).

WAR DEPARTMENT, *Washington, D. C.*

To the EDISON SAULT ELECTRIC COMPANY,
Sault Ste. Marie, Michigan.

Take notice that:

Whereas by an instrument dated August 13, 1892, as modified by instruments dated April 4, 1901; March 10, 1913; July 30, 1903; and May 8, 1905, the Secretary of War granted permission unto the Edison Sault Electric Company, Sault Ste. Marie, Michigan, to construct and maintain, subject to the conditions embodied in said instrument, certain works, structures, etc., as therein respectively recited, in the Saint Marys River, at Sault Sainte Marie, in the State of Michigan;

And whereas by act of Congress approved March 3, 1909, entitled "An act to provide for the repair, maintenance, and preservation of public works on rivers and harbors, and for other purposes" (35 Stat. L., 815), provision is made, inter alia, for the acquisition, by condemnation or otherwise, "of all lands and property of every kind and description north of the present Saint Marys Falls Ship Canal throughout its entire length and lying between said ship canal and the international boundary line at Sault Sainte Marie, in the State of Michigan" (section 11, idem, 820);

And whereas said section 11 of said act further provides:

"Every permit, license, or authority of every kind, nature, and description heretofore issued or granted by the United States or any official thereof to the Chandler-Dunbar Water Power Company, the Edison Sault Light and Power Company, the Edison Sault Electric Company, or the Saint Marys Power Company shall cease and determine and become null and void on January first, nineteen hundred and eleven, and the Secretary of War is hereby authorized
603 and instructed to revoke, cancel, and annul every such permit, license, or authority, to take effect on January first, nineteen hundred and eleven" (idem, 821):

Now, therefore, this is to certify that the Secretary of War, in compliance with said authorization and instruction, hereby revokes, cancels, and annuls the said instruments of August 13, 1892; April

4, 1901; March 10, 1903; July 30, 1903; and May 8, 1905; this action to take effect on January 1, 1911.

Witness my hand this 13th day of September, 1909.

J. M. DICKINSON,
Secretary of War.

A true copy.

C. McD. TOWNSEND,
Colonel, Corps of Engineers, U. S. A.

STATE OF MICHIGAN, *County of Wayne, ss:*

B. G. A. LAITNER, being duly sworn, on his oath states that he made service of the within notice on the Edison Sault Electric Company by personally delivering a duplicate thereof to Alexander Dow, president of said company, at Detroit, Mich., on the 1st day of October, 1909.

B. G. A. LAITNER.

Subscribed and sworn to this 18th day of October, 1909, before me.

EDWARD F. WUNSCH,
Notary Public, Wayne Co., Mich.

A true copy.

C. McD. TOWNSEND.
Colonel, Corps of Engineers, U. S. A.

604 GOVT. EX. 39.—Notice to Chandler-Dunbar Company revoking permit of June 9, 1902, to occupy a small piece of Government land for extension of company's dock.

J. A. G. O. (12738).

WAR DEPARTMENT, *Washington, D. C.*

To the CHANDLER-DUNBAR WATER POWER COMPANY,
Sault Ste. Marie, Michigan.

Take notice that:

Whereas, by an instrument dated June 9, 1902, the Secretary of War granted a license, revokable at will by the Secretary of War, unto the Chandler-Dunbar Water Power Company, Sault Ste. Marie, Michigan, to "occupy for the purpose of the extension of said company's dock a small area of land belonging to the United States Government at Sault Ste. Marie, Michigan," at the location shown in red lines on the drawing thereto attached, and subject to the conditions therein embodied;

And whereas, by act of Congress, approved March 3, 1909, entitled "An act to provide for the repair, maintenance, and preservation of public works on rivers and harbors, and for other purposes" (35 Stat. L., 815), provision is made, inter alia, for the acquisition, by condemnation or otherwise, "of all lands and property of every kind and description north of the present Saint Marys Falls Ship Canal throughout its entire length and lying between said ship canal and the international boundary line at Sault Sainte Marie, in the State of Michigan" (section 11, idem, 820);

And whereas, said section 11 of said act further provides:

"Every permit, license, or authority of every kind, nature, and description heretofore issued or granted by the United States, or any official thereof, to the Chandler-Dunbar Water Power Company, the Edison Sault Light and Power Company, the Edison Sault Electric Company, or the Saint Marys Power Company, shall cease and determine and become null and void on January first, nineteen hundred and eleven, and the Secretary of War is hereby authorized and instructed to revoke, cancel, and annul every such permit, license, or authority, to take effect on January first, nineteen hundred and eleven" (idem, 821):

605 Now, therefore, this is to certify that the Secretary of War, in compliance with said authorization and instruction, hereby revokes, cancels, and annuls said revocable license of June 9th, 1902; this action to take effect on January 1, 1911.

Witness my hand this 13th day of September, 1909.

J. M. DICKINSON,
Secretary of War.

A true copy:

C. McD. TOWNSEND,
Colonel, Corps of Engineers, U. S. A.

88:

L. C. SABIN, being duly sworn, on his oath states that he made service of the within notice on the Chandler-Dunbar Water Power Company by personally delivering a duplicate thereof to Wm. Chandler, president of said company, at Saulte Ste. Marie, Mich., on the 4th day of October, 1909.

L. C. SABIN.

Subscribed and sworn to this 5th day of October, 1909, before me.

O. W. FOWLE,
Notary Public in and for Chippewa County, Mich.

My commission expires April 9, A. D. 1910.

A true copy:

C. McD. TOWNSEND,
Colonel, Corps of Engineers, U. S. A.

GOVT. EX. 40.—Notice dated Nov. 8, 1909, to Edison Sault Light and Power Company revoking license of March 14, 1889, and proof of service; to regulate and maintain a dam on the rapids, between the mainland and Island No. 3 and within the limits
605½ of the lines marked "proposed encampment dam," etc.

J. A. G. O. (8690).

WAR DEPARTMENT, *Washington, D. C.*

To the EDISON SAULT LIGHT AND POWER COMPANY,
Sault Ste. Marie, Michigan.

Take notice that:

Whereas, by an instrument, dated March 14, 1889, the Secretary of War granted a license, revocable at will by the Secretary of War, unto the Edison Sault Light and Power Company, of Sault Ste.

Marie, Michigan, "to erect and maintain a dam on the rapids of the St. Mary's River between the mainland and Island No. 3, and within the limits of the lines marked 'Proposed embankment dam' on the map hereto attached and made a part of this instrument," subject to the provisions and conditions therein embodied;

And whereas, by act of Congress, approved March 3, 1909, entitled "An act to provide for the repair, maintenance, and preservation of public works on rivers and harbors, and for other purposes" (35 Stat. L., 815) provision is made inter alia, for the acquisition, by condemnation or otherwise, "of all lands and property of every kind and description north of the present Saint Marys Falls Ship Canal throughout its entire length and lying between said ship canal and the international boundary line at Sault Sainte Marie, in the State of Michigan" (section 11, idem, 820);

And whereas said section 11 of said act further provides:

"Every permit, license, or authority of every kind, nature, and description heretofore issued or granted by the United States, or any official thereof, to the Chandler-Dunbar Water Power Company, the Edison Sault Light and Power Company, the Edison Electric Company, or the Saint Marys Power Company, shall cease and determine and become null and void on January first, nineteen hundred and eleven, and the Secretary of War is hereby authorized and instructed to revoke, cancel, and annul every such permit, license, or authority, to take effect on January first, nineteen hundred and eleven" (idem, 821);

606 Now, therefore, this is to certify that the Secretary of War, in compliance with said authorization and instruction, hereby revokes, cancels, and annuls said revocable license of March 14, 1889; this action to take effect on January 1, 1911.

Witness my hand this 8th day of November, 1909.

J. M. DICKISON,
Secretary of War.

A true copy:

C. McD. TOWNSEND,
Colonel, Corps of Engineers, U. S. A.

88:

L. C. SABIN, being duly sworn, on his oath states that he made service of the within notice on the Edison Sault Electric Co., successor of the Edison Sault Light and Power Company, by personally delivering a duplicate thereof to William Chandler, vice president of said company, at Sault Ste. Marie, Mich., on the 27th day of November, 1909.

L. C. SABIN.

Subscribed and sworn to this 29th day of November, 1909, before me.

[SEAL.] C. B. MCNAUGHTON,
Notary Public in and for Chippewa County, Mich.

My commission expires June 4, A. D. 1913.

A true copy:

C. McD. TOWNSEND,
Colonel, Corps of Engineers, U. S. A.

607 Gov't's Ex. 41.—Notice dated Nov. 8, 1909, to Edison Sault Light and Power Company, revoking license of April 2, 1888, to lay a wire cable across the canal and proof of service.

J. A. G. O. (8690).

WAR DEPARTMENT, *Washington, D. C.*

To the EDISON SAULT LIGHT AND POWER COMPANY,
Sault Ste. Marie, Michigan.

Take notice that:

Whereas by an instrument dated April 2, 1888, the Secretary of War granted a license, revocable at will by the Secretary of War, unto the Edison Sault Light and Power Company, a corporation organized under the laws of the State of Michigan, to lay a wire cable across the St. Marys Falls Canal, and the grounds thereof, at the rapids of Saint Mary's River, in the State of Michigan; subject to the provisions and conditions therein embodied;

And whereas by act of Congress, approved March 3, 1909, entitled "An act to provide for the repair, maintenance, and preservation of public works on rivers and harbors, and for other purposes" (35 Stat. L., 815), provision is made inter alia, for the acquisition, by condemnation or otherwise, "of all lands and property of every kind and description north of the present Saint Marys Falls Ship Canal throughout its entire length and lying between said ship canal and the international boundary line at Sault Sainte Marie, in the State of Michigan" (section 11, idem, 820);

And whereas said section 11 of said act further provides:

"Every permit, license, or authority of every kind, nature, and description heretofore issued or granted by the United States, or any official thereof, to the Chandler-Dunbar Water Power Company, the Edison Sault Light and Power Company, the Edison Sault Electric Company, or the Saint Marys Power Company, shall cease and determine and become null and void on January first, nineteen hundred and eleven, and the Secretary of War is hereby authorized and
608 instructed to revoke, cancel, and annul every such permit, license, or authority, to take effect on January first, nineteen hundred and eleven" (idem, 821);

Now, therefore, this is to certify that the Secretary of War, in compliance with said authorization and instruction, hereby revokes, cancels, and annuls said revocable license of April 2, 1888; this action to take effect on January 1, 1911.

Witness my hand this 8th day of November, 1909.

J. M. DICKINSON,
Secretary of War.

A true copy:

C. McD. TOWNSEND,
Colonel, Corps of Engineers, U. S. A.

88:

L. C. SABIN, being duly sworn, on his oath states that he made service of the within notice on the Edison Sault Electric Company,

successor to the Edison Sault Light and Power Company by personally delivering a duplicate thereof to William Chandler, vice president of said company, at Sault Ste. Marie, Mich., on the 27th day of November, 1909.

L. C. SABIN.

Subscribed and sworn to this 29th day of November, 1909, before me.

[SEAL.] O. B. MCNAUGHTON,
Notary Public in and for Chippewa County, Mich.

My commission expires June 4, A. D. 1913.

A true copy:

C. McD. TOWNSEND,
Colonel, Corps of Engineers, U. S. A.

609 Gov't's Ex. 42.—Notice to Edison Sault Company dated Nov. 8, 1909, revoking license of July 6, 1893, and proof of service, to enter land of the United States, forming part of Canal grounds and to widen tailrace, now in use, between its power house and Island #3 from 15 to 25 feet, and to extend small embankment dam down to Island No. 4 as shown by plat.

J. A. G. O. (8690).

WAR DEPARTMENT, *Washington D. C.*

To the EDISON SAULT ELECTRIC COMPANY,
Sault Ste. Marie, Michigan.

Take notice that:

Whereas by an instrument, dated July 6, 1893, the Secretary of War granted a license, revocable at will by the Secretary of War unto the Edison Sault Electric Company, "to enter upon the land of the United States forming part of the St. Mary's Falls Canal grounds at Sault Ste. Marie, Michigan, and to widen the tailrace now in use by said company, between its power house and Island No. 3, from fifteen to twenty-five feet; and to extend the small embankment dam, running down from Island No. 3 to Island No. 4, all as shown on the attached plat of a part of the canal grounds, the red line on the plat showing the extent of the proposed work";

subject to the provisions and conditions therein embodied;

610 And whereas by act of Congress, approved March 3, 1909, entitled "An act to provide for the repair, maintenance, and preservation of public works on rivers and harbors, and for other purposes" (35 Stat. L., 815), provision is made, inter alia, for the acquisition, by condemnation or otherwise, "of all lands and property of every kind and description north of the present Saint Marys Falls Ship Canal throughout its entire length and lying between said ship canal and the international boundary line at Sault Sainte Marie, in the State of Michigan" (section 11, idem, 820);

And whereas said section 11 of said act further provides:

"Every permit, license, or authority of every kind, nature and description heretofore issued or granted by the United States, or any official thereof, to the Chandler-Dunbar Water Power Company, the Edison Sault Light and Power Company, the Edison Sault Electric Company, or the Saint Marys Power Company, shall cease and determine and become null and void on January first, nineteen hundred and eleven, and the Secretary of War is hereby authorized and instructed to revoke, cancel, and annul every such permit, license, or authority, to take effect on January first, nineteen hundred and eleven" (idem, 821):

Now therefore, this is to certify that the Secretary of War, in compliance with said authorization and instruction, hereby revokes, cancels, and annuls any authority given by said license of July 6, 1893, to maintain the constructions therein authorized; this action to take effect January 1, 1911.

Witness may hand this 8th day of November, 1909.

J. M. DICKINSON,
Secretary of War.

A true copy.

C. McD. TOWNSEND,
Colonel, Corps of Engineers, U. S. A.

611 *88:*

L. C. SABIN, being duly sworn, on his oath states that he made service of the within notice on the Edison Sault Electric Company by personally delivering a duplicate thereof to William Chandler, vice president of said company, at Sault Ste. Marie, Mich., on the 27th day of November, 1909.

L. C. SABIN.

Subscribed and sworn to this 29th day of November, 1909, before me.

[SEAL.] O. B. MCNAUGHTON,
Notary Public in and for Chippewa County, Mich.

My commission expires June 4, A. D. 1913.

A true copy:

C. McD. TOWNSEND,
Colonel, Corps of Engineers, U. S. A.

GOV'T EX. 43.—Notice dated Nov. 8, 1909, to Edison Sault Electric Company revoking license of June 15, 1906, and proof of service, to erect a derrick and lay an electric tram road from east end of Island No. 4 to the dock for Government tugs, back of north pier.

J. A. G. O. (8690).

WAR DEPARTMENT, *Washington, D. C.*

To the EDISON SAULT ELECTRIC COMPANY,
Sault Ste. Marie, Michigan.

612 Take notice that:

Whereas, by an instrument (letter), dated June 15, 1906, the Secretary of War granted a license, revocable at will by the Secre-

tary of War, unto the Edison Sault Electric Company, of Sault Ste. Marie, Michigan, "to erect a derrick and lay an electric tram road from the east end of Island No. 4 to the dock for Government tugs back of the northeast pier of St. Marys River, Michigan;"

And whereas, it was provided in said instrument, inter alia:

"1. That this permission shall continue in force to the close of navigation of the present season only, and that the structures shall then be removed and the canal grounds restored to their present condition by the grantee at its own expense;"

And whereas, by act of Congress, approved March 3, 1909, entitled "An act to provide for the repair, maintenance, and preservation of public works on rivers and harbors, and for other purposes" (35 Stat. L., 815), provision is made, inter alia, for the acquisition, by condemnation or otherwise, "of all lands and property of every kind and description north of the present Saint Marys Falls Ship Canal throughout its entire length and lying between said ship canal and the international boundary line at Sault Ste. Marie, in the State of Michigan" (section 11, idem, 820).

And whereas, said section 11 of said act further provides:

"Every permit, license, or authority of every kind, nature, and description heretofore issued or granted by the United States, or any official thereof, to the Chandler-Dunbar Water Power Company, the Edison Sault Light and Power Company, the Edison Sault Electric Company, or the Saint Marys Power Company, shall cease and determine and become null and void on January first, nineteen hundred and eleven, and the Secretary of War is hereby authorized and instructed to revoke, cancel, and annul every such permit, license, or authority, to take effect on January first, nineteen hundred and eleven" (idem, 821):

Now therefore, this is to certify that the Secretary of War, in compliance with said authorization and instruction, hereby directs that any structures erected under authority of said license of June 15, 1906, if not already removed, shall be removed on or before January 1, 1911.

Witness my hand this 8th day of November, 1909.

J. M. DICKINSON,
Secretary of War.

A true copy:

C. McD. TOWNSEND,
Colonel, Corps of Engineers, U. S. A.

613 *ss:*

L. C. SABIN, being duly sworn, on his oath states that he made service of the within notice on the Edison Sault Electric Company by personally delivering a duplicate thereof to William Chand-

ler, vice president of said company, at Sault Ste. Marie, Mich., on the 27th day of November, 1909.

L. C. SABIN.

Subscribed and sworn to this 29th day of November, 1909, before me.

[SEAL.] O. B. MCNAUGHTON,
Notary Public in and for Chippewa County, Mich.

My commission expires June 4, A. D. 1913.

A true copy:

C. McD. TOWNSEND,
Colonel, Corps of Engineers, U. S. A.

Gov't Ex. 44.—Certified copies of all of the permits issued for power developments in the river, except Mich.-Lake Superior Power Co.

614 Part of EXHIBIT 44.—Canal permit to Michigan-Lake Superior Power Company.

(J. A. G. O.) (13622).

Whereas, by the river and harbor act, approved June 13, 1902, it is provided (32 Stats., 361) that, subject to the conditions therein mentioned:—

"The Michigan Lake Superior Power Company, of Sault Sainte Marie, Michigan, its successors and assigns, after first obtaining consent of the Secretary of War and the Chief of Engineers and their approval of the said canal and remedial works proposed, is hereby authorized to divert water from the Saint Marys River into its water-power canal now being constructed at Sault Sainte Marie, Michigan, for water power purposes while and so long as such works and diversion of waters from said river shall not injuriously affect navigation therein, nor impair or diminish the water levels or natural increase thereof either in Lake Superior or in the United States Ship Canal and locks or the navigable channels, locks, or ship canals connected therewith, whether natural or artificial, now existing or which may hereafter be established or created by the United States for navigation purposes."

And whereas, the said Michigan-Lake Superior Power Company has submitted for the approval of the Secretary of War and the Chief of Engineers plans of its water-power canal and remedial works for the diversion of the water from the Saint Marys River, authorized by said act, and has applied for consent of the Secretary of War and Chief of Engineers to such diversion;

And whereas, the Chief of Engineers has approved the said plans, and has given his consent to such diversion, subject to the acceptance of said company of the conditions hereinafter specified;

Now, therefore, this is to certify that the Secretary of War
615 hereby approves the said plans, which are hereto attached, and hereby gives his consent to the diversion of water from the

Saint Marys River, as authorized by said act, subject to the acceptance by said company of the following conditions:

1. That the regulating works, including escape valves at power house, controlling works, and remedial works, shall be operated under the inspection of the engineer officer in charge of the Saint Marys Falls Canal, who shall have access to them at all times.

2. That when the mean level of Lake Superior at the canal for any calendar month falls below 601.5 feet above mean tide at New York according to the levels of the United States Lake Survey Office the flow through the canal shall be reduced, the amount of reduction increasing as the monthly mean level falls until it reaches 601.0, when all flow shall be stopped until the monthly mean level again exceeds 601.0, all without claim against the United States or against any officer thereof.

3. That, in addition to the requirements of condition 2 (supra), all flow shall likewise be stopped, without claim against the United States or against any officer thereof, should the monthly mean level of the lake remain below 601.5 for a period of six consecutive calendar months, and shall not be resumed until the monthly mean level shall exceed 601.5.

4. That when the monthly mean level rises above 603.0 the flow through the canal and remedial works shall be increased to their maximum capacity, and shall so continue until the monthly mean level shall be less than 603.0, without claim against the United States or against any officer thereof.

616 5. That should the monthly mean level of the lake remain above 603.0 for a period of six consecutive calendar months said company shall alter its works at its own expense as soon as practicable so as to allow more flow.

6. That the United States shall have the right to assume entire control of the flow of water through the canal and remedial works in cases of accidents or of emergencies temporarily affecting navigation through the United States Ship Canal.

7. That should cross currents detrimental to navigation be created by the intake or by the outflow of the canal said company shall construct such booms, training-walls, and other works as may be necessary to remedy the evil.

8. That said company, in its arrangement and construction of remedial works, shall leave a suitable channel and water flow for the passage of logs over and through Saint Marys Falls.

9. That these limitations are in addition to the special limitations of the act of June 13, 1902, regarding riparian or other rights of any persons or corporation and the remedies therefor.

10. That the elevations above mean tide at New York above specified are those established and in use at this date by the office of the survey of the Northern and Northwestern Lakes commonly known as the Lake Survey Office, at Detroit, Michigan.

11. Finally, the object and aim of the foregoing paragraphs being to hold the waters of the lake and river under the absolute control of

the United States in the interest of navigation, it is expressly understood that said company shall not be entitled to damages
617 should the Government at any time or for any cause exercise its right to control and suspend the flow of water through the power canal in the interest of navigation.

Witness my hand this 12th day of December, 1902.

ELIHU ROOT,
Secretary of War.

This instrument is also executed by the Michigan Lake Superior Power Company by Francis H. Clergue, its president, thereunto lawfully authorized, this ninth day of December, 1902, in testimony of the acceptance by said company of the foregoing conditions.

THE MICHIGAN LAKE SUPERIOR POWER COMPANY,
By FRANCIS H. CLERGUE, *Prest.*

Attest:
H. VON SCHON.
F. T. TREMPE.
[SEAL.]

618 Jan. 12, 1888.

Application and revocable permit, Edison Sault Light & Power Co., electric wire transit over ship canal.

HOTEL IROQUOIS,
SMITH BROS. & KEMP, Props.,
Sault Ste. Marie, Mich., Sept. 27, 1887.

Mr. E. S. WHEELER,
Supt. St. Marys Falls Ship Canal.

DEAR SIR: It is the desire of the Edison Sault Light and Power Company to transmit electricity over the ship canal by means of wires placed high enough above the water level that there will be no possibility of any interference with navigation.

The plans that we believe to be most feasible are as follows: To place a tower two hundred and twenty-five feet high on each side of the canal at or near where the map accompanying this letter is marked with a cross X outside of the Government property and the wires to be suspended from the above-named towers not lower than one hundred and eighty feet above the canal water level, and if you learn that the above height will not be sufficient for all needs of navigation and you order us to place them higher we will do so. We ask for the above grant subject to your approval of the work, and we hereby give you the right to use the towers for the purpose of observation or signals. You can use either one or both of them in any way you wish so long as you do not interfere with our use of
619 them for our purpose. If you should wish to use one of them for a range-light tower and wish to have it placed at any particular point between the place designated by us and the canal bank

and will give us notice where you wish to have it placed before we begin building, we will place it where you may direct.

Very truly, yours,

EDISON SAULT LIGHT & POWER CO.,
Per B. B. POWELL, *Mngr.*

Whereas the Edison Sault Light and Power Company, a corporation organized under the laws of the State of Michigan, through B. B. Powell, manager, has applied for permission to carry wires from their machine house at the rapids of St. Marys River over the Saint Marys Falls Canal to the village of Sault Saint Marie;

And whereas Lieutenant Colonel Orlando M. Poe, Corps of Engineers, United States Army, in charge of the aforesaid canal, reports that the said company proposes to erect a tower on each side of said canal, outside of the canal grounds, of sufficient height to bear the wires above the largest vessels; that inquiry has developed the fact that if the wires be carried at a minimum height of one hundred and ninety feet above the surface of the water in the canal they will offer no obstruction to any vessel now existing or likely to be built, and he therefore recommends that the desired permission be granted, subject to certain conditions hereinafter set forth;

620 And whereas the Chief of Engineers, United States Army, reports that no objection exists, so far as is known to him, to granting the privilege requested upon the conditions prescribed by Lieutenant Colonel Poe, and recommends that the same be given accordingly:

Now, therefore, I, William C. Endicott, Secretary of War, do hereby license the said Edison Sault Light and Power Company to carry over, and suspend above, the Saint Marys Falls Canal and grounds a line of wires for the purpose of connecting the machine house of said company at the rapids of Saint Marys River with the village of Sault Ste. Marie, in the State of Michigan.

But it is understood and agreed that this instrument vests in the said Edison Sault Light and Power Company no title, estate, or usufructuary interest whatever in the premises, but is a revocable license; and, further, that the same is granted upon the express conditions following, to wit:

1. That no portion of the towers, supports, or structures for bearing the said line of wires shall be built, located, or rest upon the grounds belonging to the canal aforesaid, or any part thereof.

2. That no portion of the wires of the said company above the said canal and grounds shall be at a less height above the waters of the said canal than one hundred and ninety feet.

3. That the Engineer officer of the United States Army in charge of the Saint Marys Falls Canal may supervise the work, so far as may be necessary to insure the observance of the conditions herein imposed.

621 4. That at any time, whenever in the opinion of the Secretary of War it may for any reason be expedient that this

license should be revoked, the Secretary of War shall and may cause notice to that effect to be given to the said Edison Sault Light and Power Company, whereupon the rights and privileges herein granted shall cease and determine, and the said company hereby promises and agrees that within ten days from the receipt of said notice the said company shall remove from said premises, without cost to the United States, all the property of said company of whatever nature or character, and all the débris occasioned thereby, and restore the premises hereby authorized to be occupied by said company in as good condition as at the date of this license; and in case the said company shall not within the said ten days after receipt of notice as aforesaid vacate said premises and remove therefrom all the property of said company then and thenceforth, at expiration of said ten days all improvements and fixtures of said company remaining upon said premises shall belong to and become thereupon the absolute property of the United States, free of charge.

And the said Edison Sault Light and Power Company hereby promises and agrees that this revocable license shall not be assigned, in whole or in part, without the consent of the Secretary of War for the time being, and that the premises hereby permitted to be occupied shall not be used by said company for any other purpose or object than herein specified, and that any sum which the officer in charge of said premises may have to expend in putting the premises hereby authorized to be occupied by said company in as good a condition as at the date of this license, after revocation thereof,
622 shall be repaid on demand by said company, and the said company hereby agrees to pay to the United States all damages which may arise under this license by reason of a violation thereof or nonperformance of the same by the said company.

Witness my hand this twelfth day of January, 1888.

WILLIAM C. ENDICOTT,
Secretary of War.

This instrument is also executed by the Edison Sault Light and Power Company by its manager, B. B. Powell, thereunto lawfully authorized; the word "reservation," in the seventh, eleventh, thirteenth, and seventeenth lines from the top of this page, being erased, and the word "premises" inserted in lieu thereof before execution this third day of January, 1888, in testimony of its acceptance of the provisions and conditions therein set forth.

THE EDISON SAULT LIGHT AND POWER COMPANY,
B. B. POWELL, *Manager.*

In presence of—
G. G. SCRANTON,
W. W. SNELL.
[SEAL.]

623 April 2, 1888.

Application and revocable permit to Edison Sault Light & Power Company to lay cable under canal.

The Edison Sault Light and Power Company have lately received from the Secretary of War a license to stretch wires above the canal at a height of 190 feet. Changes in plans make it most advantageous for the company to use submarine cables. The company therefore respectfully request permission to lay a cable across the canal and grounds at the points marked "A" and "B" on the accompanying plat.

Should the petition be granted the company proposes to lay the cable in the following manner: Across the grounds on each side of the canal it will be buried in a trench two feet deep. It will enter and leave the canal through the piers as follows: The material from one pocket on each side will be removed down to the bottom. The cable will then pass vertically downwards through the pier and out into the canal under the inner face of the pier. No timber will be cut; the pockets will be carefully refilled. Across the bottom of the canal a trench about two feet will be dug in which the cable will be placed. It is proposed to dig this tranch with a dredge, making it no wider than a single cut of the dipper, about six feet, all material excavated to be removed in dump scows. It is estimated that a dredge can dig this trench in 20 hours. After the cable is in
624 place the ridges thrown up by the dredge will be put back into the trench by a diver. Should future improvements in the canal, or any cause whatever, make the removal of the cable necessary, the company would expect to remove it without inconvenience, expense, or delay to the Government.

Finally, the company does not ask for any permanent rights or any privileges that will in any manner interfere with the proper use of the canal.

Should this petition be granted, the company will relinquish the privilege already given them of stretching wires over the canal.

B. B. POWELL,
Secretary & Mgr. of Edison Sault Light and Power Co.

To E. S. WHEELER,
Gen'l Supt. St. Marys Falls Canal, Michigan.

Whereas the Edison Sault Light and Power Company, a corporation organized under the laws of the State of Michigan, was heretofore, to wit, on the 12th day of January, 1888, granted a license to carry wires from their machine house, at the rapids of Saint Marys River, over the Saint Marys Falls Canal to the village of Sault Ste. Marie; and

Whereas the said company, by petition dated March 17th, 1888, has asked permission to lay a cable across the canal and
625 grounds at a section a short distance above that formerly in-

dicated as the location of the towers, and to relinquish the privilege of crossing overhead; and

Whereas, Lieutenant Colonel O. M. Poe, United States Engineer officer, in charge of the Saint Marys Falls Canal, reports that as far as the operation of the canal and the convenience of commerce are concerned the method now proposed is less objectionable than the privilege already granted, and recommends that the license of January 12th, 1888, aforesaid, be revoked and a new one granted, subject to certain conditions, hereinafter prescribed; and

Whereas, the Chief of Engineers, United States Army, reports that there appears to be no objection to granting the permission asked for, upon the conditions and for the reasons given by Colonel Poe, and recommends, accordingly, that the existing license be revoked, and that the new license asked for be granted:

Now, therefore, I, William C. Endicott, Secretary of War, do hereby revoke the license given to the said Edison Sault Light and Power Company on the twelfth day of January, 1888, to carry over and suspend above the Saint Marys Falls Canal and grounds a line of wires for the purpose of connecting the machine house of said company, at the rapids of Saint Marys River with the village of Sault Ste. Marie, in the State of Michigan, and do hereby license the said Edison Sault Light and Power Company to lay a wire across the Saint Marys Falls Canal and the grounds thereof, at the rapids of Saint Marys River, in the State of Michigan.

626 But it is understood and agreed that this instrument vests in the said Edison Sault Light and Power Company, no title, estate, or usufructuary interest whatever in the premises aforesaid, but is a revocable license; and further, that the same is granted upon the express conditions following, to wit:

1st. That within the limits of the canal reservation, the work of laying the cable as well as of all subsequent operations in connection with its manipulation, handling, repair, replacement, etc., &c., shall be under the direction and control of the U. S. engineer in charge of the canal; and, that the cost of all surveys, inspection, examination, supervision, &c., growing out of the exercise of such direction and control shall be borne by the "Edison Sault Light and Power Company."

2nd. That in laying the cable across the grounds on each side of the canal it shall be buried in a trench at least two feet in depth; that in entering and leaving the canal, no portion of the timber piers shall be cut; that these piers shall always be left in as good condition as before *as before* entering upon them; that between the piers the cable shall be carried in a wooden box sunk at least two feet below the bottom of the canal as it is at present, or as it may be made at any future time; that after the box for the cable is in place the trench containing it shall be filled and all inequalities leveled off by a diver.

That at any time whenever, in the opinion of the Secretary of War, it may for any reason be expedient that this license should be revoked, the Secretary of War shall and may cause notice to
627 that effect to be given to the said Edison Sault Light and Power Company, whereupon the rights and privileges herein granted shall cease and determine, and the said company hereby promises and agrees that within ten days from the receipt of said notice the said company shall remove from said premises, without cost to the United States, all the property of said company of whatever nature or character, and all the débris occasioned thereby, and restore the premises hereby authorized to be occupied by said company in as good condition as at the date of this license, and in case the said company shall not, within the said ten days after receipt of notice as aforesaid, vacate said premises and remove therefrom all the property of said company then and thenceforth, at expiration of said ten days, all improvements and fixtures of said company remaining upon said premises shall belong to and become thereupon the absolute property of the United States free of charge.

And the said Edison Sault Light and Power Company hereby promises and agrees that this revocable license shall not be assigned in whole or in part without the consent of the Secretary of War for the time being, and that the premises hereby permitted to be occupied shall not be used by said company for any other purpose or object than herein specified, and that any sum which the officer in charge of said premises may have to expend in putting the premises hereby authorized to be occupied by said company in as good condition as at the date of this license, after revocation thereof, shall be repaid on demand by said company, and said company hereby agrees to pay to the United States all damages which may arise under this license by reason of a violation thereof or nonperformance of
628 the same by the said company.

Witness my hand this second day of April, 1888.

WM. C. ENDICOTT,
Secretary of War.

This instrument is also executed by the Edison Sault Light and Power Company by B. B. Powell, secretary & manager thereunto lawfully authorized, the word "reservation," in the seventh, eleventh, thirteenth, and seventeenth lines from the top of this page being erased, and the word "premises," inserted in lieu thereof before execution, this 31st day of March, 1888, in testimony of its acceptance of the provisions and conditions therein set forth.

EDISON SAULT LIGHT & POWER CO.,
By B. B. POWELL, *Secretary & Manager.*

In presence of—
E. JNO. ELLIS.

March 14, 1889.

Application and revocable permit Edison Sault Light & Power Company to erect dam in rapids between mainland and Island No. 3.

629 AUGUST 14, 1888.

To the Hon. the SECRETARY OF WAR,
Washington, D. C.

SIR: We, the Edison Sault Light and Power Co., of Sault Ste. Marie, do hereby petition you for permission to erect a dam in the rapids of the St. Marys River, at a point as designated on the accompanying drawing from the point on the mainland marked "D" to the island marked "E" within the limits of the lines marked "proposed embankment dam 10 feet wide on top."

The same to be erected on such terms and conditions as you shall propose in event you shall grant the permission to allow the same to be done, we assuring you that it will in no way interfere with private rights or public interests and improvements, as the Government of the United States are the owners of all river frontage and riparian rights from the shore of land marked "D" to a point below the rapids.

Trusting you will cause the necessary things to be done to grant us the permission, we have the honor to be, sir,

Very respectfully,

THE EDISON SAULT LIGHT AND POWER COMPANY,
By P. M. CHURCH, *Vice President.*

The above duly authorized by the board of directors of the Edison Sault Light and Power Co.

B. B. POWELL,
Sec'y Edison Sault Light and Power Company.
AUGUST 20TH, 1888.

630 At a regular meeting of the Edison Sault Light and Power Co., held at the company's office in the city of Sault Ste. Marie, Mich., on the 4th day of March, 1889, at 7.30 o'clock p. m., present C. E. Ainsworth, pres., and Directors Wm. Chandler, P. M. Church, J. H. Goff, J. P. O'Brien, B. B. Powell, and E. S. B. Sutton; quorum present.

Among the things done at said meeting I find the following:

On motion of Director W. Chandler and seconded by Director P. M. Church,

Resolved, That the president, C. E. Ainsworth, and Secretary E. B. B. Sutton, of this corporation, be, and they are hereby, fully empowered and authorized to execute for and on behalf of this corporation the revocable license between the United States of America through the honorable Secretary of War of the one part and this corporation of the other part, and do and perform all things pertaining thereto which may be requisite and necessary in the premises

to construct and maintain an embankment dam from our station house on the mainland to Island No. 3 in the rapids of the St. Mary's River according to the rules, instructions, and dictation of the Hon. Secretary of War, according to the map and revocable license now before this board of directors, and according to any and all rules, direction, and regulations which may at any time come to us from said Hon. Secretary of War, and to accept with all the terms and provisions and conditions set out in said revocable license for and in behalf of this corporation.

Carried.

Directors voting aye: Director C. E. Ainsworth, P. M. Church, J. B. O'Brien, J. H. Goff, B. B. Powell, E. S. B. Sutton.

Nays, none.

631 On motion the above minutes being read the same were approved. Carried. All directors present voting therefor.

OFFICE OF THE SECRETARY OF THE
EDISON SAULT LIGHT & POWER CO.,
Sault Ste. Marie, Mich., March 5, 1889.

I, E. S. B. Sutton, secretary of the Edison Sault Light & Power Co., do hereby certify that I have compared the foregoing copy of a resolution being and remaining on the records of said corporation with the original record thereof now remaining in my office and have found the same to be a correct transcript therefrom, and the whole of such original record.

In testimony whereof I have hereunto set my hand and affixed the seal of said corporation at Sault Ste. Marie, Michigan, this 5th day of March, A. D. 1889.

[SEAL.] E. S. B. SUTTON, *Secretary.*

STATE OF MICHIGAN, *County of Chippewa, ss:*

CORYDON E. AINSWORTH and E. S. B. SUTTON each being duly sworn and each for himself doth depose and say that he is a director of the Edison Sault Light and Power Company, a corporation organized and existing under the laws of the State of Michigan, and has been for more than two months last past, and that the said Corydon E. Ainsworth is the president of the said corporation and has been such president for more than two months last past, and the said

E. S. B. Sutton is the secretary of the said corporation and has

632 been such secretary for more than two months last past, and that each have also been acting in their respective official capacity for and in behalf of said corporation, and that each of these deponents is the identical person who signed the revocable license hereto annexed and also is the identical person mentioned in the annexed copy of resolution, and that they executed said revocable license in and according to the terms and conditions set forth in said resolution.

E. S. B. SUTTON.

Subscribed and sworn to before me this 5th day of March, 1889.

[SEAL.] THOMAS J. MARTIN, *Notary Public.*

I, Louis P. Trempe, postmaster of the city of Sault Ste. Marie, Mich., do hereby certify that I am well acquainted with the above named C. E. Ainsworth and E. S. B. Sutton, and do further certify that they are the persons they represent themselves to be in the annexed revocable license and papers annexed, and that said C. E. Ainsworth is the president of the said corporation, and that E. S. B. Sutton is the secretary of the said corporation, and each have been acting as such officers respectively for more than two months last past.

LOUIS P. TREMPE, *Postmaster.*

633 REVOCABLE LICENSE.

The Edison Sault Light and Power Company of Sault Ste. Marie, a corporation existing under the laws of the State of Michigan, is hereby granted a license, revocable at will by the Secretary of War, to erect and maintain a dam on the rapids of the St. Mary's River between the mainland and Island No. 3, and within the limits of the lines marked "Proposed embankment dam" on the map hereto attached and made a part of this instrument upon the following provisions and conditions:

1. That said dam shall be so constructed as not to interfere with private rights or public interests and improvements.

2. That the Engineer officer of the United States Army, in charge of the district within which the dam is to be constructed, may supervise its construction so far as may be necessary to secure the compliance with the conditions herein contained.

3. That any sum that may have to be expended after revocation of this license in putting any premises or property hereby authorized to be occupied or used in as good condition for use by the United States as it is at this date shall be repaid by said Edison Sault Light and Power Company on demand.

Witness my hand this fourteenth day of March, 1889.

REDFIELD PROCTOR,
Secretary of War.

634 This license, with the terms, provisions, and conditions set out therein, is hereby accepted this fifth day of March, 1889.

THE EDISON SAULT LIGHT AND POWER COMPANY,
By C. E. AINSWORTH, *President,*
and E. S. B. SUTTON, *Secretary.*

Signed in presence of—
J. H. GOFF,
W. CHANDLER,
CHAS. C. CLARKE,
THOMAS J. MARTIN,
FRANK PERRY,
All of Sault Ste. Marie, Mich.

[SEAL.]

Aug. 13, 1892.

Application and revocable permit Edison Sault Electric Company to construct embankment dam in rapids to point halfway to shores of Island 1 & 2.

(Edison Sault Electric Co., Sault Ste. Marie, Mich. Harris T. Dunbar, pres.; Wm. Chandler, vice president & sect.; Sault Savings Bank, treas.; W. F. Kingan, manager.)

JUNE 27, 1892.

Hon. L. A. GRANT,
Asst. Secretary of War, Washington, D. C.

DEAR SIR: We desire to construct an embankment dam in the St. Mary's River Rapids adjacent to our property, extending into the river to a point half the distance from the shore to Islands
635 Nos. 1 & 2, which would be to the extent of our riparian rights, in accordance with the general plan shown on the accompanying map. The tailrace, as shown, would be adjacent to and outside of the Government canal reservation and of Island No. 3. In case permission is granted for this work we will abandon the use of the present tailrace upon the completion and use of the proposed tailrace, which is definitely stated to be three years after the commencement of work thereon. In this connection I would call attention to your number 8407 under date of May 27th, 1891, and would state that your suggestion therein contained has been carried out as far as possible on our part.

Respectfully,

HARRIS T. DUNBAR, *President.*

The Edison Sault Electric Company is hereby granted a license, revocable at will by the Secretary of War, to construct and maintain an embankment dam in the St. Marys River rapids, adjacent to its property at Sault Ste. Marie, Michigan, and extending into the river to a point hal*d* the distance from the shore to Islands Nos. 1 and 2, in accordance with the general plan shown on the map hereto attached, upon the following provisions and conditions:

1. That no portion of the dam, except that extending to Island No. 3, shall be so constructed as to extend farther than midway between the company's property and Islands Nos. 1 and 2.

2. That the Engineer officer of the United States Army in charge of the district within which the dam is to be built may supervise its construction so far as may be necessary to secure compliance with the conditions of this license.

636 3. That any sum which may have to be expended after revocation of this license in putting any premises or property hereby authorized to be occupied or used in as good condition for use by the United States as it is at this date shall be repaid by said Edison Sault Electric Company on demand.

Witness my hand this thirteenth day of August, 1892.

L. A. GRANT,
Acting Secretary of War.

This license, with the terms, provisions, and conditions set out therein, is hereby accepted this eighth day of August, 1892.

[W. D. SEAL.] EDISON SAULT ELECTRIC CO.,
By HARRIS T. DUNBAR, *President.*

Signed in presence of—
F. E. DUNBAR.
[E. S. E. CO. SEAL.]

July 6, 1893.

Application and revocable permit Edison Sault Electric Co. to widen tailrace between power house and Island No. 3 from fifteen to twenty-five feet and to extend embankment dam from Island No. 3 to Island No. 4.

(Edison Sault Electric Co., Sault Ste. Marie, Mich. Harris T. Dunbar, pres.; Wm. Chandler, vice president & sec.; Sault Savings Bank, treas.; W. F. Kingan, manager.)

637 JUNE 22, 1893.

Gen. O. M. POE,
Corps of Engineers, U. S. A.,
Detroit, Michigan.

DEAR SIR: We would respectfully ask permission to widen the tailrace now in use by this company, between its power house and Island No. 3, from 15 to 25 feet, the material excavated to be entirely removed or placed back of its present location as may be directed by the engineer in charge.

Also to extend the small embankment dam running down from Island No. 3 to Island No. 4.

This work is only proposed as a temporary relief, and is only proposed to be used until the tailrace of our water power is removed to the outside of Island No. 3, as was provided for under a former arrangement with the United States.

We do not think that we would desire to use the present tailrace exceeding five years.

I enclose a tracing, a small section of the map of the canal grounds as they appeared in 1892, covering the portion in which the suggested work is proposed, the red lines showing the extent.

Respectfully,

W. CHANDLER, *V. P.*

REVOCABLE LICENSE.

638 The Edison Sault Electric Company is hereby granted a license, revocable at will by the Secretary of War, to enter upon the land of the United States forming part of the St. Marys Falls Canal grounds, at Sault Ste. Marie, Michigan, and to widen the tailrace now in use by said company, between its power house and Island No. 3, from fifteen to twenty-five feet; and to extend the

small embankment dam, running down from Island No. 3 to Island No. 4, all as shown on the attached plat of a part of the canal grounds, the red lines on the plat showing the extent of the proposed work, upon the following provisions and conditions:

1. That unless sooner revoked this license shall expire at the end of five years from the date of its execution.

2. That the excavated material shall not be removed, but it shall be deposited back (south) of its present position.

3. That any sum which may have to be expended after revocation of this license in putting any premises or property hereby authorized to be occupied or used in as good condition for use by the United States as it is at this date shall be repaid by said Edison Sault Electric Company on demand.

Witness my hand this 6th day of July, 1893.

L. A. GRANT,
Acting Secretary of War.

April 4, 1901.

Application and revocable license Edison Sault Electric Co., modification of license of Aug. 13, 1892, so as to permit construction
639 *of power station and extension of embankment so as to make a new tailrace outside of Island No. 3 and deepening the same to extend over United States property east of Chandler-Dunbar property.*

(Edison Sault Electric Company. Harris T. Dunbar, pres.; Wm. Chandler, vice pres. & sec.; Sault Savings Bank, treas.; W. F. Kingan, manager.)

SAULT STE. MARIE, MICH., *Dec. 5, 1900.*

Colonel G. J. LYDECKER,
Corps of Engineers, Detroit, Mich.

DEAR SIR: Referring to our conversation of Nov. 16th regarding an application for the improvement of our electric light station, would say that we desire to reconstruct the same, our present penstocks and station having passed the period of their usefulness.

The fact that we are compelled to operate the plant continuously necessitates the construction of a more modern plant, located farther to the north, and when completed, transfer to it and then abandon the present one.

This will also necessitate the carrying out of the original plan, that of running the tailrace outside of Island #3, now used for the State fish hatchery, and the eventual abandonment of the present tailrace.

The accompanying blue prints shows the general outline and approximate location of the proposed new work.

The improvements contemplated upon the tailrace consist of
640 clearing the channel from boulders, and deepening it in such a way as to give a clear and unobstructed flow of water from the wheels to pass outside of Island #3.

These improvements as proposed will not materially change the present situation or flow of water.

I trust the proposition as outlined will meet with your approval, and if so, will you kindly forward to the Secretary of War?

Respectfully,

EDISON SAULT ELECTRIC CO.,
WM. CHANDLER, *V. P. & Secy.*

Whereas, by revocable license, dated Aug. 13, 1892, the Acting Secretary of War gave unto the Edison Sault Electric Company permission to construct and maintain an embankment dam in the St. Marys River rapids adjacent to its property at Sault Ste. Marie, Michigan, and extending into the river to a point half the distance from the shore to Islands Nos. 1 and 2, in accordance with the general plan sho'n on the map thereto attached, and subject to the conditions therein contained;

And whereas said Edison Sault Electric Company has now applied to the Secretary of War for a modification of said license of August 13, 1892, so as to permit the construction of a proposed new power station, indicated at A—A′ on the attached blue print, and to extend the present embankment as indicated by the heavy white line from a to c, and remove the red-lined section a, b; also to make a new tail race outside of Island No. 3, at said place; all as shown on the attached blue print;

641 Now therefore, this is to certify that the Secretary of War hereby modifies said revocable license of August 13, 1892, so as to permit the construction of a proposed new power station, indicated at A—A′ on the attached blueprint, and to extend the present embankment, as indicated by the heavy white line from a to c, and to remove the red-lined section a b, as shown on said blueprint; also gives unto said company permission to make a new tail race outside of Island No. 3, at said place, as shown on said blueprint, subject to the following conditions:

1. That this permission shall not be construed as authorizing any invasion or impairment of the riparian rights of any other person or corporation, and the right to withdraw the permission for the use of this tail race whenever the interests of the Government so require, is expressly reserved.

2. That the work of clearing and deepening the tail race shall conform to the plan outlined in the company's letter of March 23, 1901, a copy of which is hereto attached.

3. That as soon as the new tail race is ready for use said company shall abandon the tail race now used on the inside of Island No. 3, and relinquish to the United States all rights of the company between said island and the shore.

4. That the work herein permitted to be done shall be subject to the supervision and approval of the Engineer officer of the United States Army in charge of the locality.

5. That any sum which may have to be expended, after revocation of this license, in putting any premises or property, hereby authorized to be occupied or used, in as good condition for use
642 by the United States as it is at this date, shall be repaid by said Edison Sault Electric Company on demand.

Witness my hand this fourth day of April, 1909.

[SEAL.] ELIHU ROOT,
Secretary of War.

June 9, 1902.

Revocable licenses to Chandler-Dunbar Water Power Company for extension of dock on Government land near Claims 95 & 96.

THE SHOREHAM,
Washington, D. C., March 23, 1901.

HON. SECRETARY OF WAR,
Washington, D. C.

SIR:—In addition to the plan of the proposed tail race for which we are making application to improve and to which this is attached and made a part.

We would state that it is our desire to clear out the drift wood, loose boulders, rock and such other material as may be encountered, to a depth of not exceeding ten feet below the present surface; this at a point where the property of our company on the east intersects with that of the Government, and on the lines indicated by the plan herein referred to.

From this as a grade starting point we wish to extend the
643 improvement down stream on the lines indicated by our plan, gradually increasing the depth of excavation as the slope of the bottom requires until a plane is reached when no further excavation would be required, the natural surface and improved channel being on the same grade, at a point not lower down the channel than the westerly extremity of Island No. 5.

It is not intended or requested on our part to make any permanent embankment on either side of the excavation so applied for unless required by the Government.

It is not expected on our part that after completing the improvements herein contemplated that we will change the volume or flow of water over the Government property which we now seek to utilize. It is hoped on our part to pass the same amount of water over the same area as would naturally flow, concentrating its fall at a given point and utilizing it for commercial purposes instead of as at present the fall is diffused over a long distance and goes to waste.

Very respectfuly,

EDISON SAULT ELECTRIC CO.

(The Chandler Dunbar Water Power Co., Sault Ste. Marie, Mich. Wm. Chandler, pres.; H. T. Dunbar, vice pres.; Sault Savings Bank, treas.; P. M. Church, sec'y.)

APRIL 11, 1902.

Major W. F. BIXBY,
Corps of Engineers, U. S. A., Detroit, Mich.
(Through Mr. Joseph Ripley, Asst. Engineer.)

DEAR SIR: Referring to that portion of our communication
644 of March 15th regarding the dock at the west end of our property, we would herewith ask for a permit or license to complete and use in our business that portion of the dock that is claimed to be beyond the line of the riparian ownership of the Government.

We would be willing to have a license so worded as to give the Government the use of the dock, without charge, for any business the Government might have occasion to do over the property.

Accompanying this is a sketch showing the present condition of the dock and about what it will be when cribs are sunk on the other sides.

Respectfully,

CHANDLER-DUNBAR WATER POWER CO.,
Per W. CHANDLER, *Prest.*

REVOCABLE LICENSE.

The Chandler-Dunbar Water Power Company, Sault Ste. Marie, Michigan, is hereby granted a license, revocable at will by the Secretary of War, to occupy, for the purposes of the extension of said company's dock, a small area of land belonging to the United States Government, at Sault Ste. Marie, Michigan, as shown by red lines on the attached drawing, upon the following provisions and conditions:

1. That the United States shall have the perpetual right to the free use of said dock in the future, so far as needed for Government work connected with future canal operations and improvements at Sault Ste. Marie, Michigan.

645 2. That any sum which may have to be expended after revocation of this license in putting any premises or property hereby authorized to be occupied or used in as good condition for use by the United States as it is at this date, shall be repaid by said Chandler-Dunbar Water Power Company on demand.

Witness my hand this ninth day of June, 1902.

WM. CARY SANGER,
Asst. Secretary of War.

March 10, 1903.

Application and revocable permit, Edison Sault Electric Company as modified by revocable license of April 4, 1901. Permits company to build farther out into rapids in front of shore properties leased by said company; to construst wider tail race below power house, etc.

(Edison Sault Electric Company. Harris T. Dunbar, pres.; Wm. Chandler, vice pres.; Sault Savings Bank, treas.; W. F. Kingan, manager.)

SAULT STE. MARIE, MICH., *Feb. 24, 1903.*

Hon. ELIHU ROOT,

Secretary of War, Washington, D. C.

DEAR SIR: It is the desire of the Edison Sault Electric Co. to have the revocable license, granted to it under date of April
646 14th, 1901, modified in accordance with the designs shown on the accompanying blue-print map. The improvements projected under this license as granted have not as yet been completed.

The modifications desired from the licenses as granted, contemplate changing the location of the proposed power house; increasing its height somewhat, and increasing the width of the tail race proportionally, as shown on the accompanying map colored yellow, and are to take the place of those projected, and shown on the map colored white.

The south and east boundary lines of the Chandler-Dunbar Water Power Company's property, occupied by the Edison Sault Electric Company under permanent lease, are shown on the map colored green.

Respectfully,

EDISON SAULT ELECTRIC COMPANY,
Per WM. CHANDLER, *V. P. & Secy.*

Whereas, by revocable license, dated August 13, 1892, the Acting Secretary of War gave unto the Edison Sault Electric Company permission to construct and maintain an embankment dam in the St. Marys River Rapids adjacent to its property at Sault Ste. Marie, Michigan, and extending into the river to a point half the distance from the shore to island Nos. 1 and 2, in accordance with the general plan shown on the map thereto attached, and subject to the conditions therein contained;

And whereas, by an instrument dated April 4, 1901, the Secretary of War modified said revocable license of August 13, 1892, so
647 as to permit the construction of a proposed new power station, indicated at A A′ on the blue print hereto attached, and to extend the embankment, as indicated by the heavy white line from a to c, and to remove the red lined section a b, as shown on said blue print; and also gave unto said company permission to make a new tail race outside of island No. 3, at said place, as shown on said blue print, subject to the conditions herein contained;

And whereas said Edison Sault Electric Company has now applied to the Secretary of War for a modification of said permit of April 4, 1901, as hereinafter specified, so as to allow it to build farther out into the rapids of the St. Marys River in front of the shore properties owner or leased by said company;

Now, therefore, this is to certify that, in accordance with the recommendation of the Chief of Engineers, the Secretary of War hereby modifies said instrument of April 4, 1901, so as to permit said company to build farther out into the rapids of the St. Marys River, at said place, the work herein authorized being shown on the attached blue print and specifically described by reference thereto, as follows:

1. The removal of the wall and buildings (abB) colored red.

2. The substitution of a somewhat larger power house (E E′), and a longer wall (a d), colored yellow, in place of the already authorized power house (A A′) and wall (a c), colored white.

3. The construction of a wider tail race (G G′) below the power house, of width suited to the latter, in lieu of the old tail race (f f′).

648 These modifications are made upon the following conditions:

1. That this permission shall not be construed as authorizing any invasion or impairment of the riparian rights of any other person or corporation, and the right to withdraw the permission for use of this tail race whenever the interests of the Government so require, is expressly reserved.

2. That the work of clearing and deepening the tail race shall conform to the plan outlined in said company's letter of March 23, 1901, a copy of which is hereto attached.

3. That as soon as the new tail race is ready for use said company shall abandon the tail race now used on the inside of Island No. 3, and relinquish to the United States all rights of the company between said island and the shore.

4. That the work herein permitted to be done shall be subject to the supervision and approval of the Engineer officer of the United States Army in charge of the locality.

5. That any sum that may have to be expended, after revocation of this license, in putting any premises or property, hereby authorized to be occupied or used, in as good condition for use by the United States as it is at this date, shall be repaid by said Edison Sault Electric Company on demand.

6. That the area now occupied by the old buildings and old tail race shall be abandoned to the United States as soon as the new buildings and new tail race can reasonably be completed and ready for service.

Witness my hand this 10th day of March, 1903.

WM. CARY SANGER,
Acting Secretary of War.

649 July 30, 1903.

Notice to Edison Sault Electric Company from Secretary of War modifying permit of March 10, 1903, restricting extension of works farther into the river than one-half the distance from shore to the nearer of Islands 1 and 2 and forbidding cutting away rock bottom in river at crest of rapids.

Take notice that—

Whereas by an instrument dated March 10, 1903, the Edison Sault Electric Company, subject to the conditions prescribed therein and by way of modification of the revocable license to said company, dated August 13, 1892, as modified by an instrument dated April 4, 1901, was granted permission to build its embankment dam, power house, and other work farther out into the St. Marys River rapids at Sault Ste. Marie, Michigan, than previously authorized, as described in said instrument dated March 10, 1903, and as shown on the blue print attached thereto;

And whereas it is made to appear that the interests of the United States require that said permission dated March 10, 1903, should be modified as hereinafter specified;

Now, therefore, the Secretary of War hereby modifies said instrument dated March 10, 1903, so as to add thereto the following conditions to the permission therein given, to be numbered 7 and 8, respectively, namely:

7. That no part of the proposed embankment dam, power house, and other works shall be so constructed as to extend
650 farther into the river than one-half of the distance from shore to the nearer island of Islands Nos. 1 and 2.

8. That the present rock bottom in the river at the head of the rapids and head of the head race shall not be cut away or otherwise lowered or deepened.

Witness my hand this 30th day of July, 1903.

ELIHU ROOT,
Secretary of War.

JOSEPH RIPLEY being duly sworn, on his oath states that he made service of the within notice on the Edison Sault Electric Company by personally delivering a duplicate thereof to William Chandler, vice pres. of said company, at Sault Ste. Marie, Mich., on the 7th day of August, 1903.

JOSEPH RIPLEY.

Subscribed and sworn to this 11th day of August, 1903, before me:
[SEAL.]
VICTOR E. METZGER,
Notary Public.

May 8, 1905.

Permit to Edison Sault Electric Company to build temporary sandbag cofferdam between Islands 1 and 2 and a little farther.

651 Edison Sault Electric Company, Sault Ste. Marie, Mich. Alex Dow, pres. & gen. mgr.; Wm. Chandler, vice pres.; S. C. Carleton, treas.; D. B. South, secy.; W. F. Kingan, mgr.

SAULT STE. MARIE, MICH., *April 3rd, 1905.*

JOSEPH RIPLEY, Esq.,
Engineer in Charge U. S. River and Harbor Improvements,
St. Marys River.

SAULT STE. MARIE, MICHIGAN.

SIR: The undersigned would respectfully request permission to construct a temporary sandbag cofferdam from the point marked "G" upon the accompanying map, being a point upon the present dike of the power plant of the petitioner and two hundred (200) feet, more or less, up-stream from the west end of Island No. 1, to the aforesaid Island No. 1, and a similar cofferdam from Island No. 1 to Island No. 2, and a third similar cofferdam from Island No. 2 down stream to such point as may be necessary for the temporary protection of work during construction of a power plant proposed to be erected under the terms of the permit granted by the honorable Secretary of War of the United States under date of March 10, 1903. The aforesaid temporary sandbag cofferdam is represented approximately upon the accompanying map upon the lines G H, I J, and K F, it being understood and agreed on the part of the petitioner that the said temporary cofferdam shall be maintained only during the period necessary for the construction of the power plant aforesaid.

652 And it is further requested that permission be granted to construct a dike as a part of the aforementioned power plant, said dike to be located approximately as shown by the lines D E and E F on the accompanying map, and to take the place of the proposed dike along the line D F, as granted in a permit from the honorable Secretary of War of the United States under date of March 10th, 1903.

And also to be permitted to make the necessary excavations for head race, power house, and tail race within the boundaries of the above described dike.

All of which is respectfully requested.

EDISON SAULT ELECTRIC COMPANY,
WM. CHANDLER, *Vice President.*

Whereas, by instrument dated March 10, 1903, as subsequently modified by instrument dated July 30, 1903, permission was granted by the Secretary of War to the Edison Sault Electric Company to construct an embankment dam, power house, and accessory works in the St. Marys River, at Sault Ste. Marie, Michigan, as specifically

described in said instrument of March 10, 1903, and shown on the map attached thereto; such permission, however, being subject to the conditions set forth in said instrument of March 10, 1903, as modified by said instrument of July 30, 1903;

And whereas, application is now made by said Edison Sault Electric Company for permission to make certain alterations in the
653 proposed work and certain additional constructions in connection therewith; and the Chief of Engineers, United States Army, has recommended that permission be given to the extent hereinafter set forth;

Now, therefore, this is to certify that the Secretary of War hereby gives the said Edison Sault Electric Company permission for the construction of a temporary sandbag cofferdam as indicated in red on the attached blue print and described by reference thereto as extending from the point G to Island No. 1, between Islands No. 1 and 2, and from Island No. 2 to the point F.

This permission, however, is given upon the following conditions:

1. That the said temporary sandbag cofferdam shall be entirely removed by said company not later than the close of navigation of the calendar year 1905.

2. That the work herein permitted and required to be done shall be subject to the supervision and approval of the Engineer officer of the United States Army in charge of the locality.

Witness my hand this 8th day of May, 1905.

[SEAL.]

WM. H. TAFT,
Secretary of War.

October 30, 1905.

Application and extension of time to remove cofferdam.

654 Edison Sault Electric Co. Alex Dow, pres. & gen. mgr.; S. G. Carleton, treas.; Wm. Chandler, vice pres.; D. B. South, sec'y.

18 WASHINGTON AVE., DETROIT, MICH.,
October 17, 1905.

Lieut. Col. CHAS. E. L. B. DAVIS,
Corps of Engineers, U. S. A.,
U. S. Engineer's Office, Detroit, Mich.

DEAR SIR: On account of delays, due to causes beyond our control, to our work in the rapids of the St. Marys River, it will not be safe to remove our temporary sandbag cofferdam at the time specified in the permit for its construction issued by the Secretary of War under date May 8, 1905. We respectfully ask for an extension of time which will allow us, say, a working period under the protection of the cofferdam of two months next spring and sufficient time thereafter to remove the cofferdam; that is to say, an extension until, say, the 31st day of July, 1906.

Yours, truly,

EDISON SAULT ELECTRIC COMPANY.
By ALEX DOW, *President.*

[1st indorsement.]

U. S. ENGINEER OFFICE,
Detroit, Mich., Oct. 19, 1905.

1. Respectfully forwarded to the Chief of Engineers, U. S. A., with the following remarks and recommendations:

2. Permission to build this cofferdam was granted by this office April 4, 1905, was revoked by telegram of April 13, 1905, and finally authorized by Chief of Engineers by telegram of May 11, 1905 (E. D. 38452).

3. It is respectfully recommended that the time for its removal be extended to July 31, 1906, on which date the dam must be entirely removed.

CHAS. E. L. B. DAVIS,
Lieut. Col., Corps of Engineers.

[2nd indorsement.]

WAR DEPARTMENT,
OFFICE OF THE CHIEF OF ENGINEERS,
Washington, October 28, 1905.

1. Respectfully submitted to the Secretary of War.

2. Permission to build this cofferdam was granted by the Secretary of War, May 8, 1905.

3. Attention is invited to 1st indorsement hereon by Lieutenant Colonel Davis, in whose recommendation I concur.

A. MACKENZIE,
Brig. Gen., Chief of Engineers, U. S. Army.

[3rd indorsement.]

WAR DEPARTMENT, *October 30, 1905.*

Approved as recommended by the Chief of Engineers in the preceeding indorsement.

ROBERT SHAW OLIVER,
Acting Secretary of War.

656 June 15, 1906.

Application and revocable permit Edison Sault Electric Company to erect a derrick and lay electric tramroad east of Island No. 4 &c.

EDISON SAULT ELECTRIC COMPANY,
Sault Ste. Marie, Mich., June 9th, 1906.

Mr. JOSEPH RIPLEY,
General Supt., and Asst. Engineer,
St. Marys Falls Canal, Sault Ste. Marie, Michigan.

DEAR SIR: We would respectfully ask permission to erect a derrick and unload sand for our construction work at the east end of the canal reservation, on the north side of the tug dock, and also to lay an electric tramroad from the east end of the Michigan fish

hatchery track to this place, as shown, approximately, by the accompanying blue prints. This permit to continue to the close of navigation of the present season. All work to be done under the direction and supervision of the U. S. engineer in charge.

This permit is asked on account of the possibility of interference with the plans of the Government contractors for the widening of the canal should we use our own dock on the west end of the Chandler-Dunbar Co. property.

Respectfully,

EDISON SAULT ELECTRIC COMPANY,
By WM. CHANDLER, *Vice Pres.*

657

WASHINGTON, *June 15, 1906.*

59809 Engs.

SIR: In answer to your application of the 9th inst., permission, revocable at will by the Secretary of War, is hereby granted the Edison Sault Electric Company, in accordance with the recommendation of the Chief of Engineers, U. S. Army, to erect a de'rick and lay an electric tramroad from the east end of Island No. 4 to the dock for Government tugs, back of the northeast pier of St. Marys River, Mich., at the location shown on the map attached hereto, subject to the following conditions:

1. That this permission shall continue in force to the close of navigation of the present season only, and that the structures shall then be removed and the canal grounds restored to their present condition by the grantee at its own expense.

2. That the work herein permitted to be done shall be subject to the supervision and approval of the local officer of the Corps of Engineers, U. S. Army, whose address is Detroit, Michigan.

Very respectfully,

ROBERT SHAW OLIVER,
Assistant Secretary of War.

Mr. WM. CHANDLER,
Vice President Edison Sault Electric Co.,
Sault Ste. Marie, Michigan.

(Map 59809–3 Engs.)

658 Sept. 10, 1906.

Extension of permit to remove sandbag cofferdam to Edison Sault Electric Company.

EDISON SAULT ELECTRIC CO.,
Sault Ste. Marie, Mich., June 22, 1906.

JOSEPH RIPLEY,
Supt. St. Marys Falls Canal,
Sault Ste. Marie, Michigan.

DEAR SIR: We would respectfully request that the permit granted by the Secretary of War under date of May 8, 1905, for the erection of a temporary sandbag cofferdam in the rapids of St. Marys River

and the extension of the same from the close of navigation, 1905, until July 31, 1906, be further extended until October 31st of the present year.

We find in the construction of our new power house that the extension for the time named would be of very great benefit to us.

Very truly, yours,

EDISON SAULT ELECTRIC COMPANY,
WM. CHANDLER, *Vice Pres.*

659 {2nd indorsement.}

WAR DEPARTMENT,
OFFICE OF THE CHIEF OF ENGINEERS,
Washington, August 9, 1906.

1. Respectfully submitted to the Secretary of War.

2. This is an application from the Edison Sault Electric Company for an extension to October 31st next, of the time allowed for the removal of the temporary sand-bag cofferdam erected under license of May 8, 1905.

3. The construction of this cofferdam met with no objection from the Department of Justice, and I have no doubt that this request for extension of time would also receive its approval, since it does not in any way alter the strictly temporary character of the work. However, on account of recent correspondence on the subject of the licenses granted in St. Marys Rapids, I believe that the Department of Justice should be given the opportunity to express its views. I therefore recommend that this paper be referred to the Department of Justice, and that the extension asked by granted if the department makes no objection thereto.

4. This paper has been held in this office awaiting opportunity to reply to other correspondence on the same subject. Due to this delay the time for removal of the dam has expired before the request for extension has been forwarded; and the district engineer, Col. C. E. L. B. Davis, Corps of Engineers, has been notified that no coercive measures need be taken until action on this paper has been completed.

A. MACKENZIE,
Brig. Gen., Chief of Engineers, U. S. Army.

38452/110.
Inclo. 111 accomp'g.

S. G. AHS.

DEPARTMENT OF JUSTICE,
Washington, September 6, 1906.

THE SECRETARY OF WAR.

SIR: Referring to indorsement dated August 10 by The Military Secretary as Acting Secretary of War of a letter dated June 23 from Joseph Ripley, general superintendent of St. Mary's Falls Canal at Sault Ste. Marie to the Engineer officer in

660 charge at Detroit, Michigan, I have the honor to say that this department is aware of no reason why the extension of time for the removal of the temporary sang-bag cofferdam in the St. Mary's River by the Edison Sault Electric Company until October 31 next would prejudice the interests of the United States so far as affects the conduct of the pending suit to determine the title to Islands Nos. 1 and 2 at that point.

Respectfully,

H. M. HOYT,
Acting Attorney General.

[2nd indorsement.]

WAR DEPARTMENT,
OFFICE OF THE CHIEF OF ENGINEERS,
Washington, September 8, 1906.

Respectfully returned to the Secretary of War with recommendation that the time fixed for the removal of the temporary sand-bag and cofferdam mentioned herein be extended to October 31, 1906.

A. MACKENZIE,
Brig. Gen., Chief of Engineers, U. S. Army.

38425/15

[3d indorsement.]

WAR DEPARTMENT, *September 10, 1906.*

Approved as recommended by the Chief of Engineers.

ROBERT SHAW OLIVER,
Acting Secretary of War.

661 November 15, 1906.

Edison Sault Electric Company further extension of time to remove sand-bag cofferdam.

(Edison Sault Electric Company, Sault Ste. Marie, Mich. Alex Dow, pres.; Wm. Chandler, vice pres.; S. G. Carleton, treas.; E. D. South, sec.)

OCTOBER 22, 1906.

Col. CHARLES E. L. B. DAVIS,
Corps of Engineers, U. S. A., Detroit, Michigan.
(Through L. C. Sabin, genl. supt. St. Marys Falls Ship Canal.)

DEAR SIR: We have not progressed as rapidly in the construction of our new plant as we had hoped. We would therefore request that the time for the maintenance of the sand-bag cofferdam between out upper dyke and the head of Island No. 1 and between Islands Nos. 1 and 2 be extended until June 1st, 1907. Those below Islands No. 2 will be taken out practically in accordance with the present permit.

Respectfuly,

EDISON SAULT ELECTRIC COMPANY,
WM. CHANDLER, *Vice Pres.*

662 [2d indorsement.]

WAR DEPARTMENT,
OFFICE OF THE CHIEF OF ENGINEERS,
Washington, November 2, 1906.

1. Respectfully submitted to the Secretary of War.

2. This is an application from the Edison Sault Electric Company for an extension until June 1, 1907, of the time allowed for the removal of the temporary sand-bag cofferdam, erected under license of May 8, 1905.

3. The time originally set for the removal of this cofferdam expires July 31, 1906, but was extended by the Secretary of War until October 31, 1906. The previous request for extension until that date was referred to the Department of Justice on account of correspondence had with that department on the subject of certain licenses granted in the St. Marys Rapids. On the same ground, I believe that the views of that department on the present application should also be invited, and I accordingly suggest that the Secretary of War address a letter to the Attorney General, setting forth the receipt of this application and asking whether the Department of Justice is cognizant of any reason why the extension of this time, as requested, until June 1, 1907, for the removal of the temporary sand-bag cofferdam in the St. Marys River would pre*d*judice the interests of the United States, so far as it affects any litigation now in progress with which that department is concerned.

4. Should the reply of the Attorney General indicate that he entertains no objection to the extension of time requested, I recommend that the extension be granted by the Secretary of War.

A. MACKENZIE,
Brig. Gen., Chief of Engineers, U. S. Army.

38452/116.
Inclos. 115 accomp'g.

[3rd indorsement.]

WAR DEPARTMENT, *Nov. 15, 1906.*

In view of the opinion of the Acting Attorney General in his letter of the 13th instant as to said extension, the recommendation of the Chief of Engineers in the preceeding indorsement is approved.

ROBERT SHAW OLIVER,
Acting Secretary of War.

663 S. G.
986—1903. AHS.

DEPARTMENT OF JUSTICE,
Washington, November 13, 1906.

The SECRETARY OF WAR.

SIR: Replying to your letter of November 3, referring again to the matter of the Edison Sault Electric Company and to their further

request for an additional extension of time until June 1, 1907, for the removal of the temporary sandbag cofferdam in St. Marys River, I have the honor to say that this department has nothing to add to the letter of September 6 relative to a previous request for extension, and knows of no new reason why the further extension would prejudice the interests of the United States in the pending litigation.

Respectfully,

H. M. HOYT,
Acting Attorney General.

Govt. Ex.

58. Photograph Northwest Fur Company Lock of 1797. The first canal was built on the Canadian side of the river by the Northwest Fur Co. in 1797–8. The lock was 38 feet long, 8 ft. 9 in. wide, with a lift of 9 feet. A towpath was made along the shore for oxen to track the batteaux and canoes from the upper part of the rapids.

664 Govt. Ex.

59. St. Marys Rapids in 1850 from sketch in Judge Steeres collection.

60. Str. "Chicora," and Old State Lock. The first ship canal known as the State Canal was built on the American side of the river in 1853 to 1855, some 750,000 acres of land in Michigan having been granted by the United States Congress for the construction thereof. The canal was 1½ miles long, 64 feet wide at bottom, 100 feet wide at water surface, and 13 feet deep. There were two tandem locks of masonry each 350 by 70 feet, having 11½ feet of water on the miter sills and a lift of about 9 feet each. The locks were destroyed in 1888 by excavation for the present Poe Lock.

61. Photograph. View of State Lock showing down lockage of fleet from upper to lower lock.

62. Photograph. June 9, 1909. Canadian Lock accident. The Canadian Canal, 1⅛ miles long, 150 feet wide, 22 feet deep, with lock 900 feet long and 60 feet wide, having 22 feet of water on the miter sills, was built on the north side of the river in the years 1888 to 1895.

665 Govt. Ex.

63. Photograph. June 9, 1909. Canadian Lock accident. Upper end of lock, looking west, just after accident, showing recesses of upper gates.

64. Photograph. June 9, 1909. Canadian Lock accident. Looking east from upper end of lock.

65. June 10, 1909. Canadian Lock accident. General view of movable dam, looking upstream, most of girders and wickets in place.

66. June 10, 1909. Canadian Lock accident. Also gate. South leaf turned over.

67. Photograph of the str. "Frank J. Hecker," grounded in Poe Lock, St. Marys Falls Canal, Mich. Net registered tonnage 3,770, length 482 feet, beam 50 feet.

68. View showing str. "City of Glasgow" grounded in Wetzel Lock, St. Marys Falls Canal, Mich., being pulled on by three tugs. (1895) Str. "City of Glasgow," net registered tonnage 1,672.03; length over all, 312 feet; beam 41 feet.

666 Govt. Ex.

69. Fleet of vessels waiting to pass through locks. View showing 19 vessels waiting to pass through locks, being part of fleet of about 240 vessels delayed at St. Marys Falls Canal between April 24 and 29, 1907, on account of ice in river above canal.

71. View showing str. "Perkins" & "Steinbrenner" jam below the head gates, St. Marys Falls Canal, Mich., while attempting to pass each other Sept. 11, 1906. Str. "Perkins"; net registered tonnage, 4,922; length over all, 569 feet; beam, 56 feet. "Steinbrenner," net registered tonnage, 3,955; length over all, 436 feet; beam, 51 feet.

72. 25 vessels lying at the piers awaiting passage on account of blockades at Sailor's Encampment. View showing 25 vessels at piers waiting to pass through river, being part of fleet of 181 vessels delayed above and below locks at St. Marys Falls Canal by blockade of channel at Sailor's Encampment by the steamer "Douglas Houghton," between Sept. 5 and 10, 1899.

77. A view showing 50 vessels below the locks, St. Marys Falls Canal, waiting the opening of Poe Lock, May, 1910. Canadian Canal opened Apr. 12, 1910. Poe Lock opened May 5, 1910. When Poe Lock was opened there were 66 vessels up bound and 65 vessels down bound, or a total of 131 vessels awaiting lockage.

667 Govt. Ex.

668 79. Blue print, showing volume of freight in millions of short tons. Yearly average. St. Marys Falls Canals freight traffic. Means of five-year periods.

Govt. Ex.

669 81. Letter of Gen. Brady to Adj. General, December 11, 1846, suggesting reservation of lands along rapids for Government uses.

GEN'L BRADY'S LETTER OF 1846.

HEADQUARTERS, 4TH MILY. DEPT.,
Detroit, Decr. 11, 1846.

GENERAL: I deem it proper that I should explain to you why this map has been so long in my hands. The fact is that it is on so contracted a scale that, with all my knowledge of Fort Brady and the grounds around it, I dare not attempt to trace on it the bounds of

land that I considered necessary for military purposes. I, therefore, sent to Lieut. Wescott, comg. Fort Brady, a plat of what I wished him to survey for military purposes. This he has done so correctly that Mr. Lyon, the surveyor general, has from it been able to
670 trace on the map you sent me what you desired me to do. In marking this reserve, I kept in view the probability that some day the Government might build there a permanent work.

As you have in your letter of instructions to me, on this subject desired me to give my views in relation to that post, I shall merely observe that I believe that the best interest of the Government and that of the community at large would be benefitted by the Government not offering for sale any of the lots fronting on the line of the canal, from the reserve to the head of the rapids, believing, as I most assuredly do, that the day is not far distant when a canal will be made there, if not by the General Government, by Michigan and the adjoining States. The quantity of land that it will require to receive the rocks and other materials that will be taken out of a ship canal there, no one can know, and until the canal is made those lots had better remain with the present owner. Should they go into the hands of individuals before this canal is completed great would be the expense to get back the land necessary for the completion of this important work. I am, General,

Very respectfully, your most obdt. svt.,

H. BRADY, *Brig. Gen., U. S. A.*

Brig. Gen. R. JONES,
Adjt. Gen. U S. Army, Washington, D. C.

Govt. Ex.

82. Letter from General Poe to the Chief of Engineers, dated May 19, 1885.

671 LETTER OF GEN. POE TO CHIEF OF ENGINEERS, 1885.

O. & C. ST. MARYS FALLS CANAL,
UNITED STATES ENGINEER OFFICE,
34 Congress St. West, Detroit, Mich., May 19, 1885.

To the CHIEF OF ENGINEERS, U. S. A.,
Washington, D. C.

SIR: In accordance with instructions conveyed by indorsement dated Office of the Chief of Engineers, U. S. Army, May 9, 1885, upon the communication of Mr. W. H. Stillwell to the Secretary of War, giving notice that application would be made for the survey of the islands in St. Marys River, situated in sec. 6, T. 47 N., R. 1 E., of the principal meridian of Michigan, I have the honor to report that the islands, five in number, lie in the river, abreast of the canal property, as shown on the accompanying tracing, extracted from the map of the "Whelpley survey."

It appears from the map that compass readings were made from several points on shore to prominent points on the islands. These

points were probably located on the map and the outlines of the islands sketched in.

There is no record of posts or meander lines on the islands. They have therefore been considered as unsurveyed and have remained unsold. Nos. 1 and 2 lie opposite to a tract that has lately been patented to Wm. Chandler. Nos. 3 and 4 lie opposite the canal
672 lands. No. 5 was given by treaty to O-Shaw-a-no, chief of the Chippewas, and is still occupied by the Indians.

The islands are useful to the canal, and in case of its further enlargement, as proposed, will be particularly so. Even if they were not useful, the title should be retained in the United States, since their ownership by private individuals might be made the basis of obstructions to the canal, the facilities of which are greatly encroached upon already.

I respectfully recommend that instead of surveying the islands, they be reserved, in the usual manner, for the uses and purposes of the canal. This applies to Nos. 1, 2, 3, & 4. No. 5 is not included (although the most important) for the reasons stated above.

The paper referred to me is herewith returned.

Very respectfully, your obedient servant,

O. M. POE,

Lt. Col. of Engineers, Bvt. Brig. Gen., U. S. A.

2 inclosures.

Govt. Ex.

673 89. This exhibit being an official report of War Department of 1909 and single sheet of 1910 for identification, it is stipulated that the complete report as officially printed may be used without being annexed for any purposes of the case by all parties.

St. Marys Falls Canal, Michigan. Statistical report of lake commerce passing through canals at Sault Ste. Marie, Michigan and Ontario during season of 1909, with a supplementary report of commerce passing through the Detroit River. Prepared under direction of Colonel C. McD. Townsend, Corps of Engineers, U. S. Army.

Statistical report of lake commerce through canals at Sault Ste. Marie, Michigan and Ontario for the season 1910.

EAST BOUND.

Articles.	U. S. Canal.	Can. Canal.	Total.
Copper.....short tons..	121,438	26,632	148,070
Grain.....bushels..	14,943,137	24,300,195	39,243,332
Building stone.....short tons..	9,335	300	9,635
Flour.....barrels..	4,856,746	2,718,933	7,575,679
Iron ore.....short tons..	13,075,362	28,525,024	41,600,386
Pig iron.....short tons..	40,340	8,650	48,990
Lumber.....M feet beam..	558,607	44,494	603,101
Silver ore.....short tons..			
Wheat.....bushels..	17,505,949	68,754,025	86,259,974
General merchandise.....short tons..	96,337	76,950	173,287
Passengers.....number..	18,857	13,410	32,267

Statistical report of lake commerce through canals at Sault Ste. Marie, Michigan and Ontario for the season 1910—Continued.

WEST BOUND.

Articles.	U. S. Canal.	Can. Canal.	Total.
Coal, hard.....short tons..	1,109,533	549,311	1,658,844
Coal, soft.....short tons..	8,319,072	3,535,811	11,854,883
Flour.....barrels..	10	1,100	1,110
Grain.....bushels..	2,153	.....	2,153
Manufactured iron.....short tons..	226,611	169,068	395,679
Iron ore.....short tons..	.....	3,248	3,248
Salt.....barrels..	390,191	138,419	528,610
General merchandise.....short tons..	611,209	627,053	1,238,262
Passengers.....number..	14,679	19,987	34,666

SUMMARY.

Vessel passages.....number..	12,927	7,972	20,899
Registered tonnage.....net..	26,506,986	23,349,137	49,856,123
Freight:			
East bound.....short tons..	15,602,673	31,531,036	47,133,709
West bound.....short tons..	10,324,988	4,904,521	15,229,509
Total freight.....short tons..	25,927,661	36,435,557	62,363,218

Short tons are tons of 2,000 pounds.

Compiled at St. Marys Falls Canal, Michigan, under direction of Colonel C. McD. Townsend, Corps of Engineers, U. S. Army.

L. C. SABIN,
General Superintendent.

674 The foregoing is a true bill of exceptions of the United States, the Chandler-Dunbar Water Power Company, the St. Marys Power Company, the Michigan-Lake Superior Power Company, Clarence M. Brown and Charles D. Warren, as receivers of the Michigan-Lake Superior Power Company, arising on the trial of the issues between the petitioner and the said respondents and between the Chandler-Dunbar Water Power Company, and its co-respondents named.

Same contains all the findings of fact and conclusions of law adopted by the court, and the substance of all the evidence, both oral and documentary, relating to the questions of fact presented by exceptions of all parties to facts found and to refusal to find facts; also all the exceptions taken in open court on the trial of said cause to the findings of fact and requests for findings of fact and rulings thereon and exceptions to such rulings and exceptions to the conclusions of law as found by the court and also relating to the motions of the United States to limit the award on account of way of necessity and to limit the award on account of water power and lock and canal values and the rulings of the court on the conclusions of law proposed by the parties and exceptions thereto, and also such as relate to the following questions of fact, to wit:

(a) The necessity for taking all the submerged lands and flow of water described in the petition including the title in fee.

(b) As to what, if any, unusual expense and contingencies the development for power wholly upon the submerged land would have carried.

(c) The frequency of increasing the flow of Lake Superior for benefit of lower lakes.

(d) The desirability and feasibility of remedial or controlling works to regulate the out flow of Lake Superior and probable cost of same.

(e) Relating to the supposition that diversion of water through the Michigan Lake Superior Power Company's canal was
675 "not to diminish the flow of water through the rapids on the American side" and that said supposition was not entertained after 1902.

(f) Relating to the volume of water usable for power to be taken into consideration in fixing the amount of award for taking the same.

(g) The sufficiency of provisions of plans to pass ice in any conditions to be reasonably expected.

(h) Provisions in permits for revocation thereof.

(i) The capacity of the Michigan Superior Company's canal.

(j) Desire of United States and Canada for construction of controlling works, and desirability and feasibility of construction of same.

(k) Same when supplemented by the facts found in that behalf also contains all the evidence, both oral and documentary, relating to the ownership of Portage Street.

Same also contains substance of all the evidence relating to the subject of a bridge site on the Indian reserve property. It also contains substance of all the evidence relating to the purported consideration for the deed of January 22, 1908. And because the said rulings, objections and exceptions do not appear of record in those proceedings, I have, at the request of the parties, on this 10th day of May, A. D. 1912, signed this bill of exceptions.

I further certify that insofar as the testimony is incorporated by questions and answer, I deam it essential to so let it appear for the purpose of fully presenting the evidence so given, where it thus appears.

I have also permitted to be incorporated in same the findings of fact adopted by me at the request of the parties, for convenience in presenting in connection therewith their respective exceptions thereto and in order to save duplication. The Exhibits which are noted to be annexed are to be filed.

ARTHUR C. DENISON,
Circuit Judge (*designated*).

676 United States District Court, Western District of Michigan, Northern Division.

No. 638.

In the matter of the condemnation of all the lands north of the St. Marys Falls Ship Canal to the international boundary.

It is hereby stipulated that the exhibits of the United States and of the Chandler-Dunbar Water Power Company and the Michigan Lake Superior Power Company, the St. Marys Power Company, and Clarence M. Brown and Charles D. Warren as receivers of the Michigan-Lake Superior Power Company, which exhibits are numbered as follows:

Those of the United States: 7, 16½, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 71, 72, 77, 79.

The Chandler-Dunbar Company's exhibits as follows: 21, plan A (Wallace), 28, 24, 29, 17.

Michigan Lake Superior Power Company, St. Marys Power Company, and the receivers aforesaid, as follows:

Which exhibits were received in evidence as appears by the bill of exceptions filed in this cause, may be returned to the clerk of the Supreme Court of the United States and made use of on the hearing of said cause by any of the parties thereto to the same effect as
677 if the same were produced at length in the bill of exceptions.

Dated May 4th, 1912.

R. T. Strickland,
F. C. Wetmore,
Grant Fellows,
Wm. K. Clute,
Attorneys for Petitioner.

J. H. Goff,
Moses Hooper, *of Counsel,*
Attorneys for Chandler-Dunbar Water Power Company.

Leo. M. Butzel,
Attorney for Michigan Lake Superior Power Company.

Stevenson, Carpenter & Butzel,
Attorney for St. Marys Power Company and Clarence M. Brown and Charles D. Warren as receivers for the Michigan Lake Superior Power Co.

678 (Indorsed:) United States District Court, Western District of Michigan, Northern Division. No. 638. In the matter of the condemnation of all the lands north of the St. Marys Falls Canal to the international boundary. Stipulation regarding exhibits. Filed May 15, 1912. Chas. L. Fitch, deputy clerk.

680 In the Circuit Court of the United States for the Western District of Michigan, Northern Division.

UNITED STATES, PETITIONER,
vs.
CHANDLER-DUNBAR WATER POWER COMPANY, Edison Sault Electric Company, International Bridge Company, Michigan Lake Superior Power Company and St. Marys Power Company, and the city of Sault Ste. Marie, respondents.

The stretch of water called St. Marys Falls, or St. Marys Rapids, is about 3,000 feet long, and was, in its natural state, from bank to bank 4,500 feet wide. In passing this space the waters from Lake Superior fall some 18 to 20 feet, and are the potential basis of a very large water power. There are islands upon the Canadian side, and the international boundary line, midway between the main banks, is near the main channel shore of these islands, whereby it results that, if there were no artificial obstructions, substantially two-thirds of the flow of water would be upon the American side of the line.

These waters have always constituted a recognized part of the navigable waters of the Great Lakes system. The Indian, French, and Colonial commerce, in furs and in Indian supplies, passed over the rapids in canoes and bateaux. In the up-bound traffic the greater part of the materials was disembarked and carried around the rapids, over a short portage, while the canoes themselves, with their loads down bound, and light up bound, passed over the rapids. In addition to canoes and barges small schooners as large as 75 tons were occasionally floated down the rapids, instances being recorded as early as 1775 and as late of 1846, and Mackinaw boats of 50 feet were taken up.

681 As commerce increased, its necessities were met by a tramway supplanting the old portage, and the cargoes of both up and down boats were transshipped and carried along this tramway a distance of about a mile.

The direct passage of boats around the rapids was first provided for by the building, on the Canadian side, in 1797, by the Northwest Fur Company, of a lock 38 feet long, 8 feet wide, and with a lift of 9 feet. This passed the lower part of the rapids, and a tow path along the shore provided means for hauling canoes up through the remaining upper part. This lock was destroyed in 1814 by United States troops.

After much agitation for a ship canal around the rapids, Congress, in 1852, made a grant to the State of Michigan of 750,000 acres, to be used by the State for the construction of such canal. The State undertook the work and, prior to 1855, built two tandem locks, each 350 by 70 feet, and each with a lift of 9 feet. In this connection, the State acquired title, as trustee or as proprietor, to most of the

land along the shore of the lower part of the rapids and to a strip for the upper entrance canal, which strip extended up stream to slack water above the rapids and was about 3,000 feet long and 600 feet wide. Between this canal strip and the shore of the upper rapids there remained a block of land some 2,500 feet long, varying during most of its length from 150 to 250 feet in width, and at the upper end running out to nothing. This intervening strip, according to the recorded plat, contained a vacant lot (3), parts of two private claims (3 and 4), of a street (Portage), and of an Indian reservation—all the direct frontage along the rapids being on the so-called reservation.

At the point where the meander line, angling landward, touched the shoreward line of the canal strip, the meander line turned and angled at about 90° out again, and then at 90° back to the canal strip, thus forming a triangle between the canal strip and the upper river. This triangle comprised what remained of private claims 95 and 96.

The State, thus having title to the lower river and the canal strip, conveyed such title to the United States, by act of March 3rd, 1881, in connection with the taking over, by the United States, of the canal, pursuant to the act of Congress of June 14th, 1880.

In 1881, the Weitzel Lock was completed, superseding the old State lock. It had a lift of 18 feet, a width of 80 feet, and was 515 feet long.

In 1880, William Chandler applied to enter, as vacant Government land, the so-called Indian reservation along the upper
682 rapids, being the greater part of the above described intervening strip. The application was refused by the Land Office, because the land, being an Indian reservation, was not subject to entry; but eventually it was held that it was not exempt from entry as an Indian reservation, and, upon appeal, the entry was allowed and a patent issued in 1883. The cost to the patentee of this parcel, containing about 9 acres, was inconsiderable, except for the large expenses of contest and appeal. Later, Mr. Chandler having transferred his title to the Chandler-Dunbar Company, and this corporation having acquired title to the remainder of the intervening strip (lot 3 and claims 3 and 4, excepting from present consideration the street), the United States made claim that the patent to the Indian reservation did not operate to convey an island in the bed of the stream, and that the patent was invalid for the reason that the land was, in fact, not subject to entry because an Indian reservation. The United States filed its bill to establish its title to the island, and the Supreme Court, finally, in 1908, held that the statute of limitations had run against any indirect attack upon the validity of the patent, and that title to the island was conveyed. (United States vs. Chandler-Dunbar Co., 209, U. S., 447.)

In 1896, a second (parallel) lock, the Poe Lock, 800 feet by 100 feet, was opened for traffic. In 1907, it was decided to construct a third (parallel) lock. For this and for canal widening then and before then determined on, more land became necessary, and after long

negotiations, the Chandler-Dunbar Company quitclaimed to the United States, in January, 1908, a strip 2,500 feet long and averaging 100, feet wide, along the outer side of the canal, thus correspondingly lessening the width of the strip remaining in private ownership. This quitclaim was for a nominal money consideration, but in connection with substantial benefits hereafter mentioned.

The last project, in its final form, as it had taken shape before March, 1909, provided that this third lock, was to be 1,350 feet by 100 feet, 350 feet longer than the longest Panama lock. A fourth lock was also in indefinite contemplation. It was then decided by Congress to take, not merely the land presently necessary for the third lock, but all the privately owned property between the northerly existing canal strip line and the international boundary. This conclusion was expressed in the act of March 3rd, 1909; the Secretary of War filed with the register of deeds, on December 30th, 1909, the necessary instrument declaring the taking, and proceeded with
683 the construction work; and this proceeding was brought to fix the "just compensation" to be paid to the property owners for the property taken. Preliminary thereto, the United States offered, and the Chandler-Dunbar Company refused, $375,000 for its property now involved. By consent, the matter was tried and submitted to the court, without a jury, with the expectation that in this way could be had a complete finding of facts upon which the appropriation award could be finally made by this or by a reviewing court. Pending trial, the rights of the Edison-Sault Electric Company and the International Bridge Company have been adjusted by agreement.

The chief matter in dispute is the extent and value of the water-power rights for which compensation is due; and this will be first considered.

1. The nature of the riparian rights taken. It is the settled law of Michigan that the riparian owner upon a stream, even though fully navigable, owns under water to the thread of the stream, while upon the Great Lakes, their bays and arms, the rights of the littoral proprietor are bounded by high-water mark (theoretically the meander line), and the State, as sovereign, owns the submerged land. The river rule has been applied for the purposes of the case to points upon the Detroit, St. Clair, and St. Marys Rivers; the lake rule, to Lake St. Clair and to part of what is called St. Marys River. In none of the cases arising upon the channels connecting the Great Lakes has any question of the right to the flow and fall of the water been considered, but only wharfage, cutting ice, and the like.

The so-called river, at the point now involved, has many of the characteristics of a strait; indeed, save for the one element of swift current, those characteristics predominate. If we look at a map and obliterate St. Georges and the other islands, it is apparent that Lake Huron, by an arm or bay, reaches practically the foot of the rapids, and Lake Superior, by a similar, but very short arm, touches the head. If we consider the Neebish Rapids as inconsistent with

the lake character of the Huron arm, we may then find an intermediate lake between the Sault and the Neebish; indeed, this is commonly mapped as "Lake George" and "Hay Lake." If the question were open, I should at least doubt whether a riparian owner at this point had all the rights of one upon a distinct and ordinary river, but it is not open. If we may pass by other decisions as not controlling, we find that in United States vs. Chandler-Dunbar Co., supra, the Supreme Court has decided the question. True,
684 water power was not directly mentioned nor involved; but the record and proofs fully presented the claim that the upland now involved lay along a strait and not along a river; and I can find no logical distinction between that ownership of submerged land to the thread of the stream which carries title to an island, and that ownership to which attaches the right to the flow and fall of the water thereover. I conclude, therefore, that the Chandler-Dunbar Company must, in a general, preliminary way, be considered the owner of the water-power rights in question. The peculiar conditions affecting this general ownership will be considered later.

2. The necessity for taking. As to the dry land, no question exists. It will all be directly required for the proposed locks, canal, and forebay, and use for these purposes is use for navigation. As to the submerged lands out to the boundary, the matter is not so clear. A large part is clearly not directly necessary at present for the needs of navigation; but such part is so connected with, and incidental to, the other directly and presently necessary portion as to be affected by and brought within the same pervading necessity, and as to make it proper for Congress to take the whole. It is urged that the expressed determination of Congress upon this subject is conclusive; and with this, I agree; but I find here, as to all the property described, a necessity for taking for public use, as a matter of fact as well as of law.

3. Effect of this necessity. It is clear that the public right to occupy and use, in direct aid of navigation, submerged land is paramount to the rights of the private owner, and when such paramount right is exercised by a physical occupation, no right to compensation accrues. With this rule and the conclusion of the previous paragraph as premises, counsel for the United States urge that there should be no compensation awarded for any of the submerged land or its appurtenant water-power rights; while the owners contend that by the act itself and its legislative history there appears a positive intent to recognize the existence of and to pay for these same water-power rights, and that the act and the subsequent taking raise a necessary inference of law that compensation is due. I am not persuaded to accept either of these contentions.

(a) The necessity for taking all, as applied to the facts here, is a necessity of peculiar character. It may be called a constructive as distinguished from an actual necessity. As to the excess beyond a certain amount of land and water, the taking is secondary and incidental to the taking of the primary body now needed. It is

685 as if an individual, buying land for a residence, will not buy the parcel upon which he is to build, unless he can also buy adjacent parcels which he considers essential to the secure and permanent enjoyment of the residence parcel. The adjacent parcels are necessary to make the purchase of the main parcel wise and prudent, but not necessary to support the walls of the house. In the instant case the fact is that if no water was to be used above 4,000 cubic second-feet, and no land was to be occupied beyond the amount necessary for locks and appurtenant structures to use that amount of water according to present methods, the remaining water could be made to flow over the remaining land and to develop thereon its full power; but Congress has thought proper to say, in effect, that it will not buy the upland and build the third lock unless it can get the entire associated, and to some extent unitary, property. For the (supposed) 4,000 c. s. f. and for the submerged land necessary for structures for the use of the water there can be no compensation; beyond that, whatever the amount may be, compensation should be paid.

It seems an accurate formulation to say that any necessity, actual and direct or constructive and incidental, present and clear or future and contingent, may justify a taking; but that, in order to escape compensation for the rights taken, their subserviency to a paramount, outstanding right (as for navigation) must be fairly direct and complete. An analogy may be found in the rules of proof, and we may say that where there may be a necessity and Congress has declared its existence, and where such necessity, in its absolute sense, would be inconsistent with compensation, the burden is upon the owner to show that the collateral or constructive necessity is only theoretical, not imminent and substantial; while the burden is on the paramount owner, seizing the subservient right, to show that his paramountcy is real and actual and not merely theoretical.

(b) There is clearly no estoppel upon the United States to dispute the extent of water power rights or their value; and I am satisfied this right to dispute carries along a right to deny that such rights have any existence which justify assessing any value in this proceeding. The act and the instrument of taking (if the latter can bind the Government) should be construed to mean that all private water-power rights, if any, shall be taken, and that their compensatory value, if any, shall be paid.

4. Extent of the water power. The amount of water flow-
686 ing out of Lake Superior depends, primarily, upon the height of the lake, and this has fluctuated over a margin of about three feet during the past 50 years. During the 47-year period ending in 1907 the average flow was about 80,000 c. s. f.; for the 25-year period ending with 1909, about 75,000 c. s. f. For the years 1907–8–9, the average flow was slightly above 64,000 c. s. f., and this is the proper measure for this case. The 25-year average is a rather more probable measure of the future flow than is the average for the last

three years; but I am satisfied that an actual sale would be upon the lower basis. The general and well-known alarm about lowering lake levels, and fear of still lower, would, in the mind of an intending purchaser and his advising engineers, counterbalance the theoretical probability of raising levels. A period average, rather than a minimum month, should be taken, because the reasonably probable method of using this power would permit using it at all times.

Having regard to the fall between the upper and lower lines of the Chandler-Dunbar property extended at right angles to the thread, which fall is substantially 10 feet, with an effective head of 9 feet, every 100 cubic second-feet equals 100 theoretical horsepower (on the wheel), or 70 electric horsepower (on the switchboard).

It follows that the two-thirds of the total flow which would, under natural conditions, flow over the Chandler-Dunbar submerged land, with the proper method of estimating the future, viz, for the last three years, and allowing for the direct use of locks, etc., the 4,000 c. s. f., which all agree should at the last be so allowed, would develop thereon 40,000 saleable theoretical horsepower; while, if Canada is entitled to use one-half the water of the boundary stream, the share of the American owners would be 30,000 theoretical horsepower.

5. Value of the power. A vast amount of testimony has been taken bearing on this subject. A review and discussion would serve no useful purpose. The questions of what customers there are for the power, what others can be induced to become customers, how profitable a business they could conduct, and what they could afford to or would pay for mechanical or electrical horsepower, as well as the cost of the various schemes of development—all are relevant only as bearing on the present value of the raw (unimproved) power. There is a present established demand for a comparatively small amount. The natural increase from the ordinary growth of the community will not more than counterbalance the loss when the Government construction work ceases. Any further demand must be created by the promotion of power-consuming concerns. The
687 plan for promoting or securing a wood-pulp mill which would consume all the available power, storing, if necessary, its surplus product during the months of high water, is feasible and is reasonably probable of execution. Such probability is sufficiently definite and certain to justify the conclusion that all the power has a definite value, instead of the conclusion that most of it is too speculative for computation. I fix the annual value of the raw power, per theoretical horsepower, as follows: For the first 3,000 h. p., $10 each; for the second 3,000 h. p., $7.50 each; for all beyond 6,000 h. p., $5 each. The cost of development so far made should be added. These values are on the basis of a perfect and unincumbered right to the water.

6. Capitalization. Upon the basis of the annual rental value, counsel for the United States propose to capitalize at twenty per cent; respondents at four per cent. Twenty per cent is too high a

rate. This would provide for five per cent interest and for amortizing the entire principal in less than seven years. Four or five per cent is too low. The property is real estate, it is true, but not like a farm or a business block; it has value only as a component part of and as contributing to the business of manufacturing. In the supposed and most probable instance, its value would be largely dependent on the success of the wood-pulp business, and this would be subject to the contingencies of wood supply, protective tariff, substitution of other paper materials, condition of the market, and many others. Water power itself, within twenty years or ten years, may be in process of being superseded by some new method of power development. For such property, I adopt ten per cent as the proper basis of capitalization. This allows interest at five per cent and allows five per cent a year for depreciation and for amortization. A prudent manufacturer, in the average case, would not charge off less than this amount per year, nor would he be likely to engage in a manufacturing enterprise which did not promise a minimum interest and the return of the capital within twenty years.

7. The public right of navigation. The private right to develop water power from a navigable stream is clearly subject to the public right of navigation, and so it seems obvious that, if the public is purchasing the private property, the public should not be required to pay for that which it already owns. It does not follow, as a necessary inference, that the dominant right absorbs and wholly supersedes the private right; but the extent of such supersession is a question of fact in each specific case. One extreme is, for example, Niagara, where the superior right of navigation is, in its immediate and direct application, theoretical; the other extreme is, for
688 example, the Detroit River, which has a considerable fall, theoretically capable of developing power through a head race, but where we know every inch of water is needed in the channel for navigation. In every case, the burden of proof must rest on the subservient owner to show two things: First, that after the satisfaction of prior right, there will remain an unincumbered fraction of the whole unit involved; second, that this remainder fraction is substantial and capable of reasonably certain comprehension. Similar conditions will satisfy this burden in some cases and not in others. In the simple case of a small stream and a trifling commerce, I think the burden will be satisfied by showing the existing commerce and a consensus of opinion as to the probable maximum of its increase. Non sequitur that, with a large stream and a great commerce and many peculiar conditions, the problem can be solved in the same simple way. In the instant case it becomes necessary, then, to examine all the peculiar and abnormal conditions affecting the existence and extent of the servient estate for which compensation is to be assessed.

8. Peculiar and special conditions. By this is meant such as are not to be found in the ordinary water-power stream. They are of two general classes: (a) Pertinent to navigation, and (b) resulting

from the boundary character of the river. Each class has several items; the following is a partial enumeration:

(a–1) The amount of commerce passing the rapids is beyond comparison with any other analogous waterway in the world. Indeed, perhaps there is no analogous waterway. A high estimate of the value of the entire flow of the river for power would not exceed two million dollars a year, while the value of the river to the public as a commercial waterway is doubtless fifty times that amount. In the ordinary power stream the element of navigation is dormant and insignificant; here it is active and overwhelming, and it is the power element which is comparatively insignificant.

(a–2) The increase in navigation has been on geometrical ratio. The dream of one decade has been the reality of the next. One lock, planned for all future needs, has become inadequate before it was finished. We can fix what seem to be the maximum future limitations for this commerce; but such estimates may be as inaccurate as were those made twenty-five years ago.

(a–3) The upland was obviously subject to be taken for locks, and, if so taken, the riparian would have no remaining upland
689 to use in connection with the power development. Such development wholly upon the submerged land carries unusual expense and contingencies.

(a-4.) Additional locks, canals, forebays, etc., can be built to advantage only upon the submerged land. Congress might think best to provide a large number of locks, so that the great blockades which occasionally occur could be cleared away in a few hours, although most of the locks would be idle most of the time. It is not inconceivable, though improbable, to suppose that structures of this class will eventually occupy all the space not needed to pass floatable products. Then the surplus water must be diverted elsewhere. So, too, it is conceivable that Congress might construct works further down stream flowing this space with slack water and getting all the fall at a lower point. In either case, there would be no compensation for such diversion of the flow or fall from this land. The riparian has no property in the water, but only the usufruct, and as appurtenant to the submerged land, and if his title to the land fails through the assertion of a superior title, he has no remaining interest in the water; nor is it apparent how, if his title fails to part of the channel, he has any right to have the water normally flowing thereover diverted to that other part of the channel, the title to which he retains.

(a-5.) The present use of the water, in direct aid of navigation, is only for filling and operating locks and for floating a few logs. The best expert judgment, both of the Waterways Commission and of the witnesses in this case, is that 4,000 c. s. f. is the maximum amount which will ever be needed for these purposes; and, therefore, the amount to be needed for navigation, so far as the same can now be definitely determined, must be fixed at this figure, leaving the balance beyond need for navigation. I think, however, that owing to all the

contingencies involved, and above and below recited, it is impossible to fix this amount with sufficient certainty to make any definite finding of fact relating thereto, except as in this paragraph stated.

(a-6.) Other methods of using the water in direct aid of navigation may be found, requiring more or all of the water. For example, smoothing out the bed could be made to give an even flow five feet deep, and up a part of such a channel, light-draft vessels could be hauled by the power generated from the water in the remainder of the channel. For further example, the whole power might be employed to operate a ship railway transporting vessels around the rapids; or a floatable product may develop, requiring much of the width of the channel in order properly to be floated down.

690 All these examples are highly improbable—probably fantastic; but not more so than the present volume of this commerce or the present methods of transmitting this power would have been a few years ago.

(a-7.) It is further urged in this connection that there can be no development except upon structures in the bed of the stream; that no such structures can be built except by Government permit; that such permits have always been and will be, both in form and in fact, revocable, and those heretofore given have been revoked; and that large or even prohibitory license fees may be charged. It is true, the practice has been to obtain a permit, and these are revocable in form; but it is not apparent how Congress or any executive department can refuse such a permit arbitrarily, when the proposed structure has no tendency prejudicial to the interests of navigation. Those exercising the federal power have a broad discretion in deciding what is or may be prejudicial; but it cannot be an uncontrolled discretion; otherwise, they might take private property without compensation. In the present case, the contemplated method of developing the whole power is by dam across the American part of the river; and it might be well within the limits of a proper discretion for the Government not to permit such a structure. No reason has been shown, and I see none, why it would not be feasible for such a dam, under private ownership and management, to be fully subject to governmental control and regulation in all matters affecting navigation; but such divided control might cause complications, there is no clear authority therefor, and, in the absence of further legislation, the engineering officers might find room, within the limitations of sound discretion and good faith, to refuse such a permit.

The power to grant or withhold a permit implies the power to charge a license fee proportionate to the supervision and regulation required; but there is neither authority nor reason for permitting the Government, under the guise of collecting a license fee, to impose a substantial burden, in the nature of rental, upon the use by the riparian of his own property in a way not affecting navigation.

(a-8.) Clearly within the public right of navigation of the Great Lakes is the whole subject of the control of the levels of those lakes. From natural causes, the lake levels fluctuate over periods of years,

and even from year to year. Artificial causes, like the Chicago Drainage Canal, contribute. Every additional foot of water that can be had is of immense value. It may be desirable to hold back the
691 waters of Lake Superior, to maintain or raise the level there; or it may be best, artificially, to increase the discharge for the benefit of the lower lakes. Both of these things have been done. During part of every year, during recent years, the United States engineers have wholly stopped the flow of water through the Michigan-Lake Superior Power Canal, thus greatly lessening its value as a power producer. It is for the interest of a power plant in the rapids, that the river flow shall be constant and that the fluctuation should be in Lake Superior. It is for the interest of navigation in that lake that its level shall be constant and that the fluctuation shall be in the river flow. This whole subject is in the control of Congress.

There are enthusiastic advocates of a plan for a series of dams in Niagara, Detroit, St. Clair, and St. Marys Rivers, giving slack-water navigation for vessels of 25 feet draft from Duluth to Buffalo. The execution of such a plan might and probably would obliterate this water power at this point and transfer it down the river.

However unlikely this last-named plan may be, it is agreed by all that controlling works, consisting of some kind of a dam across the entire St. Marys River, built and operated through some joint arrangement with Canada, and by which the level of Lake Superior and its outflow could be regulated, would be an extremely desirable thing for both countries and of great value to the commerce of the upper and lower lakes. Such a structure I regard as within the fair limits of possibility in the not very distant future. Its erection, if at some other point, would incidentally destroy the power inchoate at this point, and if the erection was at this point, there would be a physical and direct occupation of a great part or all of the Chandler-Dunbar submerged lands, and the water power produced would be in the nature of an incidental by-product of the main navigation use. It is said that such a dam, erected by the riparian, would serve every purpose of a governmentally erected structure, and it should not be presumed that the Government would refuse to permit the riparians to do, at their own expense, an act which would serve the public interests and preserve the private rights, but would insist on doing the same act at public expense and to the destruction of the private rights. This is plausible and forceful, but we cannot assume that a future Congress will be convinced or would abdicate its right to build such a structure itself.

(a-9) It is claimed on behalf of the United States that the maintenance of the lock and canal causes the Chandler-Dunbar lands, upland and submerged, to be wholly inaccessible, except by cross-
692 ing the Government canal; that the Government might, and quite likely would, refuse to permit such crossing; and that, therefore, the Chandler-Dunbar Company could not get raw manufacturing materials to its property nor get the manufactured product away from its property. On the other hand, respondents claim that

there would be a way of necessity. Any general access by bridge across the canal would be so burdensome to navigation that the right to insist upon it must be very doubtful. However, it would not be necessary. There is no reason why ordinary foot traffic cannot cross the canal upon the lock gates, as it continually does. The railroad affords access for heavy traffic, and the maintenance of a sidetrack into this property was one of the things expected and arranged for when the quitclaim deed of January, 1908, was given. It may well be that no understanding with the engineer officers when this quitclaim was offered could create a right as against the United States, and yet such understanding may be sufficient to prevent the presumption that the United States will hereafter take an arbitrary and unjust advantage. Further, under the Chandler-Dunbar Company's riparian rights reserved in this deed it has a prima facie right to connect its property along the rapids with claims 95 and 96, and through the latter it has full access to deep-water navigation on Lake Superior. If electricity was manufactured and was to be sold, the transmission wires must cross the canal, but this could be done, as is now done, by conduit under the canal, and the probability that the Government would refuse such necessary and harmless privilege is not great enough to be taken into account in assessing damages.

(a-10) It is further urged that the riparians have no license from the board of supervisors of the county, which, under the State law, would be necessary in order to erect a dam. This is a highway of interstate commerce, over which Congress has assumed, and for many years exercised, complete control. Any control which the State or county authorities might otherwise have is suspended. The supervisors could take no effective action on the subject.

(b-1) If the riparian owns both banks and sufficient flowage rights, it is a simple problem to develop power by a dam across the stream. If he owns one bank only, he may develop power by a head race, provided he does not affect the rights of other riparian owners in a way not permitted by the law of the land. In the present case a dam built by the riparian across the stream and a lawful impairment of the rights of the owners of the opposite bank are alike impos-
693 sible, because neither the riparian's title nor the law of the land extends beyond the thread of the stream. It is a natural impression that under these circumstances the practicable development of the major part of the power is impossible; and this natural impression may account for the fact that this riparian property, if it was subject to entry, remained unnoticed for many years. Accordingly, the riparian owners find the burden upon them to show a practicable, efficient method of developing the power now going to waste. The plan they propose and the only possible plan which the record indicates is the building of a dam at approximately right angles with the stream, along the lower boundary of the Chandler-Dunbar submerged land, out to the thread of the stream, and then the extension of this dam as a wing dam or dike upstream, along the international boundary line. Theoretically, this would impound, upon the

American side of the dike, and pass over the dam the same water which would naturally flow over the same submerged land. As this is the only plan suggested, its feasibility is the only thing to consider.

(b–2) Obviously, the erection of such a structure would practically affect the amount of water flowing on the Canadian side of the dividing wall. If, according to one suggestion, the crest of the natural rock dam, at the head of the rapids, on the American side of this dike, should be scalped down a few feet in order to avoid friction and get better conditions on the wheels, the tendency would be to divert water from the Canadian to the American side. So, without such scalping, unless the wheels were so regulated as always to carry away exactly the proper amount, the tendency would be either to pull water into the American channel or to retard the flow on that side and flood the other side. These probable and possible effects might or might not be equalized by the erection of compensating works in the rapids or by using the Michigan-Lake Superior Power Canal for compensating purposes, but these things would be beyond the control of the Chandler-Dunbar Company.

(b–3) The converse situation from that suggested in the preceding paragraph may exist. So far as we are informed by this record, the Canadian Government, as sovereign or as proprietor, might see fit to remove the crest of the rock dam on its side of the dividing wall or widen and deepen the existing Canadian Power Canal, and thereby divert to the Canadian side a great part or even all of the water, leaving the Chandler-Dunbar submerged land no longer submerged. To what court could it resort for injunction or to recover damages?

694 It is a natural conclusion, from these two just mentioned considerations, that the full power could not be developed by the proposed plan, excepting subject to the contingency that a foreign government would acquiesce, or that, if it did not acquiesce, the United States Government would succeed in making the necessary further treaty; in other words, the proposed development can not be fully accomplished subject to the protection of the law of the land.

(b–4) The proposed structure, especially in connection with the proposed manufacturing plant built upon piers and covering a great part or all of the submerged land, would be an obstruction to the ice which comes down in the spring in enormous quantities, and would tend to cause an ice jam or blockade which might send the river over its banks both in the United States and Canada, and might, for example, destroy the locks. The United States Government probably would permit this, if at all, only in connection with a very large and complete reserved right of regulation and supervision. The Canadian Government also might protest against such a structure. Indeed, its construction would not unnaturally lead to a similar structure on the Canadian side, and there would of necessity be a joint supervision and regulation which in turn could only be brought about by further international agreement. Such regulation, what-

ever form it might take, injects another element of uncertainty into the situation.

(b–5) Counsel cite various treaties between the United States and Great Britain as establishing an agreement that the entire width of the channel is subject to the full right of navigation by the citizens of both countries, and hence draw the conclusion that the citizens of neither country can, without the consent of the other, appropriate to private use the bed of the stream or the flowing water. I do not find it necessary to consider this question. Whatever force the claim has tends to emphasize the uncertainties of the private right to make full development.

In the same connection it is urged that the United States, as the regulator of navigation upon the entire Great Lakes system, may consent to Canadian appropriation of the water at this point, in exchange for United States appropriation of common water at some other point. This claim may be, for the present, disposed of in the same manner as the one just mentioned.

9. Effect of these conditions. These and other unenumer-
695 ated peculiar conditions lead to the conclusion that the prima facie or normal right of the riparians to the benefit of the inchoate power on their land (above the maximum 4,000 c. s. f. estimate for locks, etc.) is so unusually and peculiarly hampered, uncertain, and vague as to put upon the riparians the burden of showing, by clear and convincing evidence, that the water power for which they ask compensation is beyond real danger of absorption by the dominant right, and beyond the objection that the difficulties of the situation make it too speculative for computation, and to the conclusion that they have not met this burden, unless by some showing not yet mentioned.

The further showing which may be thought to have this effect pertains to the water-power development which has actually taken place by private parties with the approval of both the United States and Canadian Governments or which is taking place by the United States.

10. Further special conditions. For about twenty years the Chandler-Dunbar Company, or its predecessors, or some one claiming under it, has been developing power in the rapids. This was accomplished by a short, transverse dam near the lower boundary of its line, extending out a short distance into the stream and then extending up along the bed of the stream, parallel to the bank, up to the head of the rapids. This dam or wall toward its upper end diverged out into the stream, the better to divert water into the head race and into the forebay formed by its lower part. Earlier structures of this character were replaced about 1901 by those more extensive ones which existed when this condemnation was made. While considerable in extent and cost, they were inconsiderable as compared with the structures now proposed to utilize the whole power, and they were, comparatively speaking, along the bank rather than

across the stream. Development of power thereby would be subject to some of the special objections and difficulties which have above been noted, but to many and perhaps the majority of such objections it would not be subject, or, if subject thereto, would be so in a degree very much less than the proposed plan for entire development. From year to year these developers have added to their investment relating to and depending thereon, until such investment, at the time of this taking, amounted to approximately $500,000. The public lighting of the city of Sault Ste. Marie and the maintenance of various industries there were dependent on the power so developed. The United States itself, or contractors working on its public works, has for some years taken electric power from this source and paid therefor to these private parties.

696 About 1902 the Michigan Lake Superior Power Company completed a canal from Lake Superior, above the rapids, to slack water below the rapids. This canal was planned to carry 30,000 c. s. f. or more. It has actually been carrying about 10,000 c. s. f., excepting when this flow has been temporarily diminished or stopped by the United States engineers when the Lake Superior level reached the determined minimum. Allied interests constructed upon the Canadian side of the canal compensating works, originally supposed to divert from the Canadian to the American side as much water as was to be taken by this Michigan Lake Superior Power Company canal, but whether such compensating works had such effect is in dispute and is not shown by this record. Both Governments have, however, now for a long period of years permitted 10,000 c. s. f to be used for developing power through this channel, and it is the plan and expectation of the present officials of the War Department and the present engineering officers in charge of these works, to permit 10,000 c. s. f. or more of water to pass through this power canal under average conditions and to receive payment therefor by way of a license or rental as contemplated by the act of March, 1909, with reference to surplus water.

The plans and specifications approved by the War Department and the engineers, forming a part of this general project and now in process of execution, provide for dams, cross and longitudinal, similar to those now in existence, but further out into the bed of the stream. By this structure it is the plan and expectation of such department and of such officials to develop water power for sale, pursuant to the provision of this act regarding surplus water.

The existing structures built by or under the Chandler-Dunbar Company are in connection with a tail race excavated upon the below-lying public river bed, whereby there is at the power house a fall of 15 feet instead of only the 10-foot fall (9 foot effective) which exists on the Chandler-Dunbar property. The existing dam provided for and contemplated setting 9 wheels, each capable of developing under the 15-foot head, 500 horsepower, making a total planned and partly executed development of 4,500 horsepower (elec-

trical, equalling 6,500 theoretical). At the time of condemnation, four such wheels had been set and were in use. Suitable wheels in the same location and under a 9-foot head would develop 225 horsepower (electrical) each. The outer dike of the existing head race extended to the second span of the bridge, and was capable of diverting into the head race, out of the supposed 60,000 c. s. f., substantially 6,500 c. s. f. The capacity of the four installed wheels under the existing conditions of fall and tail race has been about 2,000 c. s. f., and the amount of water actually diverted through the Chandler-Dunbar head race and works has been for some time approximated, but has not exceeded, 2,000 c. s. f.

697 The proposed United States structures in the bed of the stream will furnish water for a developed 12,700 horsepower under a 15-foot head, or 7,600 horsepower under a 9-foot effective head (both theoretical).

11. Effect of these further special conditions. I do not find in any of these permitted or present developments any estoppel, as such, as against the United States. The private development has been under permits which doubtless could be revoked as soon as their further execution became injurious to navigation, even if they could not be revoked arbitrarily. The force of these acts and this acquiescence is not by way of estoppel, but is evidential. In a situation where it is highly probable that there is surplus water which will never be directly needed for navigation, but where the riparian proprietor is unable to show with sufficient clearness how much such surplus is, evidence that the United States, speaking by the acts of those representing it, has acquiesced in a claim or joined in a declaration that certain water is subject to appropriation for power, is of strong evidential force to establish the fact so declared, and in a case otherwise doubtful, may be sufficient to meet the burden resting on the riparian. Which, then, of the various forms of acquiescence and declaration described in the previous paragraph shall be accepted as persuasive, and which shall be rejected as still insufficient?

I wholly reject for this purpose the permitted and contemplated diversion through the Michigan Lake Superior Power Canal. This was, right or wrong, supposed not to diminish the flow of water through the rapids on the American side, and the fact that it was attended by such a supposition destroys its evidential force for this purpose.

I reject also the present United States project. This will always be under its control. The Government is not inviting or permitting any one else to make an expense. It is itself making the expense, and if it chooses to abandon the plan as an unsuccessful experiment immediately on its initiation, no one can complain.

This leaves the Chandler-Dunbar development for consideration. In my judgment this is sufficient to establish that the amount seized or impounded by the Chandler-Dunbar Company is and will be surplus water, not needed directly or indirectly for navigation, save by that species of constructive need which has been above discussed and

has been thought not sufficient to destroy the right of compen-
698 sation. I think, too, that the amount of water sufficient to de-
velop 6,500 horsepower (4,500 electrical) on the property of the Chandler-Dunbar Power Company—that is, on a 10-foot fall—is the proper figure to be taken in this connection. True, so much water in cubic second feet has not yet been passed through the head race, and could not be in its present form. Some enlargement of the head opening would be necessary, but the improvements were planned for this 4,500 horsepower, an investment was made and a business built up on such plan, the tailrace which would allow this power to be developed with a smaller amount of water was permitted, and the acquiescence of the Government agent and the public was in a plan which contemplated and called for so much water as might be necessary to develop 4,500 horsepower; and I think it was included in such plan that such development would be wholly upon the Chandler-Dunbar property if the tailrace provilege should not be continued. This, then, justifies and calls for a finding, which is, in form, a finding of fact, but which, as I view it, is only a question of drawing the proper legal inference from the various facts found, to the effect that water sufficient to develop 6,500 horsepower (theoretical) on the property of the Chandler-Dunbar Company, is surplus water for which compensation should be assessed in this proceeding.

12. Amount of compensation. Under the methods already stated such 6,500 horsepower has an annual value of $55,000, and this capitalized at ten per cent amounts to a present value of $550,000.

13. The value of the upland along the rapids. This tract of land, comprising the Chandler entry, part of Portage Street, and part of private land claim No. 3, has an independent value. It is preeminently fitted for a manufacturing site in connection with the water power to be developed. It also has value in connection with the probability that it would be needed for lock and canal purposes. The private owner in such proceedings as this is not entitled to receive for a piece of property indispensable to the public improvement such amount as it is worth to the public for the improvement, since upon this method of computation condemnation for public improvements would be impossible; but the fact the property is so situated that it may some time be desired for a public improvement is one of the elements to be considered in determining just compensation when it *it* so required and taken. (Note 11.) The value of this parcel is subject to many contingencies, but I fix the same as follows (including railroad sidetrack, buildings, and cable tunnel): For uses
wholly disconnected with water power development or pub-
699 lic improvement—that is to say, for all general purposes, like
residences or hotels, factory sites disconnected with *with* this water power, etc—$20,000. For a factory site in connection with the proposed development of the entire water power to use thereon or in connection therewith, 30,000 horsepower or more, $100,000. For use as factory site in connection with the development of 6,500 horsepower, either as a single site or for several smaller factories to use

the surplus of 6,500 horsepower not now used in the city, an additional value of $20,000, or a total value of $40,000. The fact that it was desirable for use for lock and canal purposes, gives it an additional value element in each case of $25,000.

Having reached the conclusions above stated as to the amount of water power which is, for the purposes of this case, shown to be permanently available in connection with this land and as to the value for lock and canal purposes, it follows that the value of this parcel for this proceeding should be taken as $65,000.

There is no occasion to apportion this between the Chandler entry and private claim No. 3. The Portage Street subparcel is seven per cent in area of the whole parcel and is entitled to seven per cent of the values found in this paragraph. The fall appurtenant to this Portage Street parcel is so insignificant as to be negligible, and no water-power rights, as such, in connection with this subparcel, are entitled to any compensation.

14. Claims 95 and 96. These front upon deep water, above the head of the rapids. They have been used for wharfage for many years, and the wharf structures and the filling now located thereon and extending therefrom have cost, approximately, $12,000. On the submerged land appurtenant to them (or to the parts sold January 22nd, 1908, by the deed reserving all riparian rights) spoil from the lock work has been and is being dumped. It was part of the consideration for this quitclaim of 1908 by the Chandler-Dunbar Company that this fill and dump should be made by the United States, and the complete carrying out of this plan in good faith as then contemplated would have given a large frontage and a considerable area along the upper river supported by these two private claims. I fix the values of these two claims and the dump and fill, made or which should have been made, all as one parcel, as follows: For general wharfage, dock, and warehouse purposes disconnected with the development of power in the rapids and not in association with the land along the rapids, $10,000. By reason of its desirability for lock and canal purposes, an additional $10,000. In connection with the land along the rapids, if used as a part of the develop-
700 ment of the 4,500 horsepower, an additional value of $5,000. To be used in association with the land along the rapids for the development of the entire 40,000 horsepower, a still additional value of $25,000.

For the reasons stated the owners are entitled to the general purpose or base value plus the canal and lock value element, plus the 4,500 horsepower value element, making a total value of $25,000.

15. The existing dike. This is now used as the outside wall of the head race, to bring the water to the mill site in the existing development of 4,500 horsepower. It would not be material whether the award was for the value of water so delivered or for the value of the raw power plus the cost of such delivery. The latter plan having been adopted, the Chandler-Dunbar Company is entitled to the value of this dike, which I fix at $16,524.

16. The thread of the stream. I have assumed that the Chandler-Dunbar subaqueous title extended to the international boundary. It is urged that such title extends only to the thread of the stream, and that the thread of the stream is the same thing as the mathematical center between the banks of the main channel, and that, therefore, a very considerable share of the supposed 40,000 c. s. f. would flow over land beyond the Chandler-Dunbar "thread of the stream" boundary, and within the international boundary, so that the riparian could have no compensation for such amount or its proportionate water power. I do not so understand the meaning of "thread of the stream;" but rather that this phrase refers to the flow center, or, in other words, the deep water channel within the main channel, which flow center may or may not be the mathematical center. (Note 12.) The testimony in this case upon the subject of the location of the thread of the stream is the unanimous agreement of the engineers for both parties, who have delineated the thread of the stream or "thalweg" upon the respondents' large map, by which delineation it appears that over practically the whole rapids such line and the international boundary are substantially coincident. The question urged by counsel, therefore, becomes immaterial.

17. Island No. 5. This island is situated in the American edge of the rapids, below the Chandler-Dunbar property, and opposite that part of the shore already belonging to the United States. It contains about one-third of an acre in area, its length up and down stream is 175 feet, and the amount of fall between the upper
701 and the lower boundary lines extended to the thread of the stream, is two feet.

By treaty with the Indians, this island was reserved from the grants to the United States, and was confirmed as the private property of the chief, Oshawano. In the year 1889, the United States acquired title to this island by deed from those who appeared to be the grantees of Oshawano's heirs, and the United States paid therefor $5,000. Later, St. Marys Power Company, a subsidiary corporation of the Michigan-Lake Superior Company interests, took a deed from the heirs of Oshawano, set up the claim that the purported earlier deed from the heirs to the grantors of the United States was a forgery or was fraudulent, and went into possession. The United States brought ejectment in this court. At the time of the instrument of taking and of commencing condemnation proceedings, such ejectment suit had resulted in a judgment for the defendant, and a motion for a new trial, made by the United States, was undetermined. Pending this condemnation proceedings, such motion for a new trial has been granted.

The St. Marys Falls Company insists that, because it has been made a respondent to these proceedings and because the petition sought the assessment of compensation for this parcel, the United States is barred from disputing the title of such respondent, and is bound to pay to it, in the usual absolute way, whatever the value

of the parcel may be. I do not adopt this position. The petition appropriately stated the facts as to the title, and substantial justice, in all particulars, will be done by paying into court the assessed value, to remain there until the true title shall be determined, and then to be paid to the respondent or to be returned to the United States, as the event may determine.

The Government urges that the water power appurtenant to this island is worthless, and that no compensation should be assessed therefor, because it is impossible to develop any commercially valuable water power upon a two-foot head. It is true that it would be impossible for the owners of Island No. 5 to develop water power, of any commercial value, by any known means, within their own upper and lower boundaries; but such fact would not, of itself, be sufficient to prevent the award of damages for the value of such theoretical water power; otherwise, if the frontage happened to be divided into small parcels, the Government could acquire the whole without paying any water power value to any one. Ordinarily, it would be a fair method to give to such a parcel a proportion of the total water power based upon its proportion of the fall, or in this case, to give it a value as 2 feet is to 12 feet.

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In this case, however, there is intervening ownership by the United States, between this island and the lower line of the Chandler-Dunbar property. This intervening ownership would probably prevent any joinder of the two parcels for common development, has always existed, and has been evidently irremovable by any means. In view of all these conditions, I fix the value of the water-power rights appurtenant to this island and upon the theory that the Chandler-Dunbar property is entitled to develop and receive compensation for the entire 40,000 horsepower, at five per cent of the amount which would accrue to the Chandler-Dunbar Company therefor.

However, nothing has ever been done by any one looking to the development of power, directly or indirectly, opposite Island No. 5, excepting as the Government has permitted a tail race to be excavated by others in the channel running past this island. It follows, from the conclusions above reached with regard to the Chandler-Dunbar property, that the owners of Island No. 5 are not entitled to any award whatever, on account of the two-foot fall and the water power theoretically appurtenant thereto.

The island has, however, value in other ways. For general purposes, as for a cottage or a fishing station, I fix this base value at $1,000.

Owing to its location, this property has, and always has had, a stragetic value with reference to any general scheme of water development in the river and because it must be included as a tail race site, if not otherwise, in any completely efficient plan of development by any owner, private or public. This value is denied, because it is, as Government counsel say, of the "hold up" character. It

should not be permitted to assume the latter character, nor should the fair strategic value be denied because there might be an attempt at exaggeration or abuse. I fix this so-called strategic value at $10,000, and it should be awarded under the circumstances of this case to whomsoever the owner may be.

There is an additional element of value, by reason of its special desirability for lock and canal purposes. I fix this additional element of value at $5,000. The total award for this parcel will, therefore, be $16,000.

18. The Michigan-Lake Superior Power Company. The history of this company's enterprise has been stated. Litigation has been long pending and is still pending between the Chandler-Dunbar Company and the Michigan-Lake Superior Company. The former claims that whatever water goes through the power canal is
703 unlawfully diverted from flowing over the Chandler-Dunbar subaqueous lands, and that this water must be restored to its natural channel; the latter disputes this claim, for various reasons, and, among others, upon the ground of an alleged personal estoppel against the Chandler-Dunbar Company. If, in this present proceeding, an award was made on account of the entire amount—say 3,000 c. s. f. normally usable by the American riparian—it would be necessary to determine whether the Michigan-Lake Superior Company was entitled to part of that award. However, this becomes unnecessary, in view of the conclusion elsewhere reached that compensation should be awarded to the riparian for only 6,500 horsepower. Whatever goes through the Michigan-Lake Superior power canal is from the surplus above 6,500, as to which surplus the Chandler-Dunbar Company has not sufficiently established any right to compensation.

19. Portage Street. The city of Sault Ste. Marie grew up on United States public land. Streets were laid out, and lots and parcels enclosed and occupied without express authority. In 1850 Congress directed a survey and a plat to be made, and accordingly the Land Office made the Whelpley survey. This indicated the streets, the private claims, the vacant lots, the Indian reservation, and the then (1855) existing canal grant. Apparently upon the supposition that Portage Street had been a de facto street extending to the river before the canal property was granted and the canal built, this survey shows Portage Street continuing from the north bank of the canal to the south bank of the river, although such portion of the street was, upon the face of the map, inaccessible from the remainder of the street. Later, in 1879, pursuant to this survey, patent was granted for lot 3, described simply as "lot 3." Still later, when the Chandler patent was granted, the land conveyed was described as bounded on the south by Portage Street, and particularly by a line which was in fact the northeast line of Portage Street. The Whelpley survey, not followed by any patent, is not a grant of the fee of the streets to the city. At most it was an implied dedica-

tion in trust. Such dedication requires acceptance before it is operative.

The city never in any manner did anything indicating an acceptance of that portion of the street north of the channel, although on the south of the canal it improved and occupied the street in the usual manner. The parcel north of the canal has always remained wholly vacant and unoccupied, save for the occupation by the Chandler-Dunbar Company, hereafter mentioned. I conclude, therefore, that there never has been any acceptance by the city of
704 this dedication, and that it never acquired thereto any title for which it is now entitled to compensation. Considering the segregation of this part of the street, no acceptance of this part can be implied from acceptance of the other part.

In the common case of an abandoned highway the title reverts to the abutting owners because they own the fee to the center of the road, except only for the public easement. Such rule of reverter has also been applied in cities and villages, although the abutting owners have received conveyances only of platted lots described by block and number. Under the circumstances of this case, and considering the terms of the conveyances under which the Chandler-Dunbar Company claims, I think there was no reverter or passing of title to the Chandler-Dunbar Company of the reserved street area whenever it became finally apparent that the abandonment or the refusal to accept was complete; and it follows that the title never passed from the United States, and that when it determined to take this property for lock and canal purposes the city's right of acceptance, if it had so long endured, finally ceased.

The Chandler-Dunbar Company claims title by adverse possession. Not only is it impossible to urge this claim as against the United States, which is now found to be the fee owner, but the facts do not support the claim even as against the city, if that was the fee owner. There has been no specific enclosure of this parcel along the Chandler-Dunbar parcels on each side or by itself. About 1887 a small building was erected, under the Chandler-Dunbar Company, on this parcel. It was occupied by the Chandler-Dunbar Company's tenants until it burned, about 1907. This is the extent of the alleged adverse possession, and I consider it insufficient.

It follows that there should be no award for this parcel; but it is necessary to determine its value, both for effect upon the value of the entire parcel, which includes this street, already found, and as a basis for the proper ultimate judgment if the city should be held to be the owner. The fall of water appurtenant to the frontage of this parcel upon the river is two tenths of a foot. This is negligible, and this parcel is not entitled to any award of damages on account of appurtenant water power, nor should such award as is made to the Chandler-Dunbar Company, on account of the water power, be diminished on this account.

The awards to the Chandler-Dunbar Company, specified in
705 paragraph 13, should be diminished proportionately and the corresponding amounts should be awarded to the city if I am in error in determining the city's rights.

Dated December 31st, 1911.

ARTHUR C. DENISON, *Circuit Judge.*

(Endorsed:) The District Court of the United States for the Western District of Michigan, Northern Division. In the matter of the condemnation of lands north of St. Marys Falls Ship Canal to the international boundary. Opinion. Filed May 13, 1912. Chas. L. Fitch, deputy clerk.

706 File No. 638. Soo condemnation case. U. S. assignments of error. Filed June 18, 1912. Fred J. Schultheis, deputy clerk.

United States District Court, Western District of Michigan, Northern Division.

No. 638.

In the matter of the condemnation of all the lands north of the St. Marys Falls Ship Canal to the international boundary.

Assignments of error.

And now comes the United States, petitioner, by R. T. Strickland, special Assistant Attorney General; Fred C. Wetmore, U. S. attorney, and Grant Fellows and William K. Clute, special assistant U. S. attorneys, and says:

That upon the record, proceedings, and trial of the said cause and the findings of fact and law and in giving of the judgment and making the final award there is manifest error to the prejudice of the United States, and for error the United States, petitioner, assigns the following:

707 I.

The court erred in overruling the objection of the United States to the following question put to Joseph Ripley, witness for the Chandler-Dunbar Water Power Company:

"Q. On the basis of the use of the present space in the St. Marys River for locks, including the possible fourth lock, and four thousand cubic second-feet for navigation, power to be used in the bed of the stream, with railroad transportation to and from mills in the bed of the stream, what is the value of that power; take the head as fixed by the engineers in consultation, and take the flow as fixed by them, as you understand it?"

To which question, over the objection of the United States, the witness answered in substance as follows:

"A. The head, with mean elevation of Lake Superior of 602.45, the fall would be 9.77 feet in front of the Chandler-Dunbar lands. The mean discharge of Lake Superior would be 80,000 cubic second-feet. A development would be possible that would give 28,000 horsepower, computed on a basis of 68 per cent efficiency. The cost of development of that power would be in the neighborhood of two million three hundred thousand dollars. The operating expenses would be somewhere between $10 and $12 per horsepower per year. The power could be used for various purposes, such as making pulp, paper, grinding wheat, furniture manufacturing, and, computed on the basis of $32 per year per horsepower, the value per horsepower would be from $20 to $22 annual rental—the profit, the value of the horsepower after taking out operating expenses, would be $20 to $22; that, capitalized at 10%, would be $200 to $220, the value per horsepower, and for 28,000 would be between five and six million dollars.

My figures are based on one-half flow less 2,000 second-feet.

708 In reporting on probable increase in navigation and the locks necessary to take care of that increased navigation and the amount of water to be used for navigation purposes, I based my computation on the traffic for the year 1905, and that year there was 5,288 lockages through the Poe Lock, and the number of vessels passed in these lockages was 9,458. The tonnage was 36,543,484, and the lockage time totaled 3,086 hours, or 52% of the total time of the season of 5,904 hours, the season being about 243 days.

"In determining the number of lockages possible in a day to the lockage time, you would have to add the time of passing of the outgoing boat over a distance of 400 feet which the waiting boat was required to keep away from the lock gates, and also the additional time for the approaching boat to pass over the same distance, and that time was between three and four minutes; I allowed between six and seven minutes for the two movements. I allowed nine minutes, and this would reduce the idle time that the lock wasn't in operation to 2,025 hours, or to 34%. Now, if the lock had been continuously employed during the entire season, that is, for 220 days, and of full capacity, and allowing only half traffic for the 20 days in the spring and 20 days in the fall, the tonnage would have amounted to nearly 49 million tons that would have been passed through the Poe Lock alone. Then computing on the basis of the business done in the Poe Lock in June, 1905, during 444 hours of operation, the tonnage during the season would have amounted to 62 million tons; and taking it for a single day, June 25th, there is 284,293 tons passed in 28 lockages. The lock was in use 18 hours and 7 minutes of the 24 hours, and the total of the season would have been 75 million tons.

709 The new lock that was proposed, 1,300 feet long and 80 feet wide, has about a third more capacity than the Poe Lock, and for the size and draft of boats being the same as for the season of 1905 and assume the Poe Lock could pass only 50 million tons in a

season, the two locks pass 116 million tons. The improvements in the river, the new lock would give a greater draft of five feet than was available in 1905, and that would increase the capacity a third more, or making a total of 155 million tons.

"Now, with another lock on the Canadian side, and the Canadian Lock deepened and the Weitzel Lock replaced with a new lock 1,300 feet long, and a new canal with the two new locks each 1,300 feet by 80 feet wide, they would have three times 155, or 465 million tons, and that could be carried through by ships of the size of 1905; but of course with such a traffic, why, your ships would be larger. The beam is restricted to less than 60 feet now because the Poe Lock is the only one that has greater width than that, and in case of accident to that, ship owners are afraid to build greater than 60 feet at the present time; so that we could add a quarter to that tonnage and bring it up to 600 million tons. Now, I checked that up in this way. Assuming 45 minutes to a lockage, a little longer time than what was the average for the season of 1905 for the Poe Lock, and assuming one and a half vessels an average per lockage, although for the Poe Lock it is one and eight tenths for that season, that would make one boat every half hour or 48 boats per day of 24 hours for one lock, and for six locks would be 288 boats passing the canals. Now, assuming that the cargo loaded was 15,000 tons per vessel for all the down bound vessels, and assuming that one fourth of the traffic is upbound, that would be 180 boats loaded with 15,000 tons or two million seven hundred thousand tons daily, or for 220 days full traffic would
710 be 594 million tons; that would give six boats per hour each way, and the boats could be a mile apart and traveling at the speed of six miles an hour through the river channels, all of which is conservative and within the possibilities.

"Now for the use of the water for lockage purposes. There were 21 lockages a day for the season of 1905 through the Poe Lock, or 246 second feet for the season for the year. For the Weitzel Lock, there were 17 lockages a day, or 98 second feet for the year; and the Canadian Lock has also 17 lockages a day, or 136 second feet. Now, the new lock will take 22.8 feet per second, or 486 second feet per year for the maximum lockages of 32. The Canadian Lock would take 256 and the Poe Lock 375 for 32 lockages a day for the seasons, or that would make 2,575 second feet; but that is considered as a full lock of water for every lockage, which would be true if a lock was simply passing boats in one direction; but as a matter of fact they came in about the ratio on one-third one direction and two-thirds the other, so taking off one-third from that would be 1,700 second feet as the amount needed for lockage water for passing 600 million tons freight. That is based on the fall of 19 feet, which was the average for the season of 1905. Of course, for 20 feet you would add one-nineteenth to that, making about 1,800. For operating of lock machinery, lighting of grounds, and so forth, you would need somewhere from 250 to 300 second feet, and allowing 100 to 150 for lockages and wastage at locks we would have not to exceed 2,250

feet necessary for navigation purposes through the canals. For the passage of logs there would be some additional water, and the International Commission put the amount at a total of 4,000 second feet, which leaves 1,800 second feet for available passage of logs.

"The works I have in view with reference to developing the Chandler-Dunbar Water Power would be to build a dike along
711 their north boundary, starting above the international bridge, at the south end of the Canadian intercepting works and extending it down stream along their north boundary line to their east boundary line, and then building the power house construction along somewhere near the easterly line of the Chandler-Dunbar property. You would have to put in suitable gates for the discharge of the water. You would discharge a certain portion or all, according to the state of Lake Superior, through your turbine wheels. It would be practicable, through remedial or intercepting works, to discharge 65% of the flow of the river—if you were not entitled to use but 50% of the water—without material increase of expense. It would be expensive, possible, to keep the flow at 80,000 second feet through a long series of years, but the range for past years, based on monthly means, has been about 3 feet from low water to high water stages, and that could be reduced with the works that you would put in for construction purposes to about 18 inches, and with a steady flow of 70 to 73 thousand second feet. I apportion 1,800 cubic second feet to the carriage of forest products. In my mind that would be for forest products and for a short period of a few days in the spring to the passing of ice. It would be practicable to construct in remedial works means for passing forest products. You would build a sluiceway with a stony gate, and keep that closed except at the time that you want to pass the products. If the products were to be passed substantial as appears in the table on page 20 of the Statistical Report of Lake Commerce, 100 second feet would be ample. A thousand million tons could be carried through the locks with the use of 4,000 cubic second feet. The taking of water for the filling of locks from the forebay would make no difference as to the water-power development, because that water goes for navigation purposes, and it is taken from the upper pool in either case, whether it goes through the water-power forebay or goes through the ship canal."

712 II.

The court erred in overruling the motion of the United States to strike out the following question and answer in the testimony of witness Joseph Ripley:

"Redirect examination:

"Q. What, in your judgment, is the value of that piece of land colored in yellow; and if it has a different value by reason of Portage Avenue, give its value excluding and including Portage Avenue?

"A. Based on the comparative prices paid for the lands north of Water Street and below the locks—that sum being about $400,000—I would say that the value of the Chandler-Dunbar lands colored on the map, including Portage Avenue, for canal purposes, would be worth about half a million dollars."

III.

The court erred in receiving over the objection of the United States the testimony of Thomas W. Orbison, a witness called and examined by the Chandler-Dunbar Water Power Company, as follows:

"The cost of bringing to the mill site is the building of a wing wall alongside the international boundary line, on the south side of it, and I estimate that cost at $107,380.

"Q. What would you consider the reduction in value on account of the use of more volume of flow than 4,000 cubic second-feet for navigation or any other public use, for each additional thousand second-feet?

"A. Well, I would make that—I would consider that pro rata for anything up to one-third of the volume of flow.

"Q. What would you consider the reduction in value on account of additional space taken for locks beyond the possible fourth lock shown on the Government map?

713 "A. It would make the improvement more expensive for the reason that it would shorten up the distance remaining for improvement between the contemplated locks and the international boundary line, and would only lessen the value of the power to the extent of the interest on a somewhat greater cost of improvement, a comparatively slight difference.

"In the estimate that I have made, I have considered that the flumes used for harnessing the power would constitute remedial works, not only the flumes, but the gates and the dike. My plan with reference to remedial works is to start in at the present Edison Sault Electric Company's plant and build flumes for power purposes in a northerly direction, out to within 100 feet or 125 feet of the international boundary line, and then install some taintor gates, with a capacity of about 100 feet width of river, and then a dike from there out along inside of the international boundary line to the bridge pier of the international bridge, that is just about on the international boundary line.

"I have figured the cost of bringing this power to the shaft, and have a plan of the construction which I would make.

"(Witness produced plan, marked 'Defendant's Exhibit 21.')

"This plan projects remedial works. I estimate the cost of the execution of this plan to the point that you bring the power to the shaft at $1,832,736, and I figure the cost of operation and depreciation, including water rental at $12.06, figuring the rental of the water power at $5. A fair rental value of the power on the shaft is $18. To use this water I would build a pulp mill in the bed of the stream

over these flumes. There is ample room for it. If there was no
714 lock built outside of the possible fourth lock, there would still be room for the major portion of this pulp mill. I think that an arrangement could be made to develop it all, possibly. It would cost a little more per horsepower. In making my computations I have assumed that the high-water discharge on the Canadian side was 32% and on the American side 68%. The engineers fixed the amount of flow on the two sides of the international boundary line at 35% and 65%, but taking my figures for it, the Chandler-Dunbar Company would in high water have to take care of 76,550 second-feet; that is, with the extreme high flow of 112,574 second-feet. I mean to get rid of it through our works. Everyone of our flumes is opened, or capable of being opened, by raising a gate and letting the water out. I provided for taking care of 93,288 second-feet, and the flow in high water is 76,550 second-feet, leaving a leeway of 16,738 second-feet. I have provided for the passing of forest products. I haven't thought of the extent of it. It is ample, I should think, for several hundred millions a year. I have considered that the 4,000 second-feet for navigation took care of the—I haven't considered the question of the actual taking care of logs or timber going downstream, because I didn't think there would be any logs going down to amount to anything. The amount of water necessary to carry the logs would be inconsiderable."

IV.

The court erred in receiving over the objection of the United States the testimony of the witness, Joseph W. Wallace, called by the Chandler-Dunbar Water Power Company, and who testified as follows:

715 "I had plans made for this development. I produce them here for examination. My estimate of the cost, including the ground wood pulp mill and electric power for operating the chemical pulp and paper plant, was to use 9,900 horse power, total plant was $1,661,000. It appeared to be a very practical situation for a pulp and paper plant in every respect. Cost is slightly greater today. Would estimate present cost $1,783,640. I have estimated the cost of developments which appear to me logical for a power company to make if they were selling power in form of water delivered to the mills or to the flume of consumer. That would include such canals and excavation for bringings the water to the flume and taking it from the flume as would be required outside of the plant itself. That would include a dike along the Canadian territory or international boundary. I estimate the cost of that at $233,415, this including cost of necessary dikes, fore bays, and tail race excavation. Estimate based on concrete, which would show very slight depreciation. There is a copy of both of these plans in this report I handed in.

"Plans offered in evidence, marked 'Plan A.')"

V.

The court erred in receiving the testimony of Professor Gardner Williams, which testimony was in substance as follows:

"I furnished the Government certain plans for proposed electrical development of power on the Chandler-Dunbar Water Power property at the Sault. These are the copies: Two plans, one and two. These plans were offered and received in evidence, being defendant's Exhibit 23. To complete the Edison Sault plant as it was planned under my direction would cost $230,000 to $150,000 for the entire nine wheels. Such a plant would develop on a
716 nine-foot head, 4,500-horsepower electrical energy at the switchboard. But to develop that amount of power would require some changes in the head race, such as excavation in the power house above the rapids so as to enable the quantity of water required by the power house to be delivered without the excessive fall that exists in the state of nature. To reduce the velocity of the current and to bring the water to the power house at substantially its elevation above the international bridge. Either the present head race would have to be materially deepened or a less deep head race provided by building a dike further out from where it is now. 4,500 switchboard horsepower equals about 6,500 theoretical horse power."

VI.

The court erred in receiving in evidence letter from William Chandler to Major F. U. Farquhar, said letter being as follows:

"SAULT STE. MARIE, *May 19, 1883.*

"Major F. U. FARQUHAR,

"*Corps of Engineers, U. S. A., Detroit.*

"MAJOR: Referring to correspondence between Mr. E. S. Wheeler and yourself concerning a tract of land on the north side of the canal between it and the rapids, located by me with Porterfield scrip at the local land office at Marquette, Mich., June 3, 1880, and which is now pending on appeal before the Hon. Secretary of the Interior, I will submit the same proposition to you that I made verbally to your predecessor, Genl. Weitzel, regarding the terms upon which the United States could secure a title, providing the appeal proceedings are decided in my favor.

"1st. Should the United States wish to secure this tract of land for canal purposes, I will make deed to the same for any compensation that you and Mr. Wheeler may, after an investigation of all the facts concerning my location of the same, deem just and equitable.

"2nd. Should the United States only desire the title to the lower end of the tract, I will deed that portion of it without compensation.

"The above is the same proposition made to Genl. Weitzel except that your name and Mr. Wheeler's are substituted for those of Genl. Weitzel and Mr. Nobles.

"Respectfully, "WM. CHANDLER."

717

VII.

The court erred in receiving defendant's Exhibit 29, being a blue print of the present plan of the Government works for water power purposes in the rapids.

VIII.

The court erred in receiving in evidence over the objection of the United States the exhibit offered by the Chandler-Dunbar Water Power Company and described as International Waterways Commission on Regulation of Lake Erie, published in 1910, being paragraph 42, on page 22 of said report, which paragraph reads as follows:

"Attention is invited also to a discussion of the use of Lake Superior as a reservoir, which has been proposed by persons not familiar with the Great Lakes, to compensate for the diversion of water through the Chicago Drainage Canal. The result of the discussion is to show: 1, that Lake Superior, being naturally one of the greater and best regulators of flow to be found in the world, maintains a flow in the St. Marys River, its outlet, which is remarkably uniform; 2, that uniformity of flow in that river is essential to the best interests of navigation of the river itself; 3, that during the winter months, when navigation is suspended, this uniformity of flow is still necessary to maintain the level of Lake Huron and keep it in condition to maintain in its turn the St. Clair and Detroit Rivers in the spring, when navigation opens. It is not in the power of man to improve this uniformity of flow to any important degree. He may disturb it, making it less uniform, by storing water in Lake Superior;

718 but any water withheld at one season would create a deficiency in the lake below, which must be replaced by an equivalent increase of discharge from Lake Superior at another season. This would simply increase the oscillations in the levels of the lakes below—that is, would injure them—without compensating in any degree for the diversion of water through the Chicago Drainage Canal."

IX.

The court erred in receiving in evidence, over the objection of the United States, from the same report, at pages 162 and 163, tables 38 and 39, which were offered in evidence by the Chandler-Dunbar Water Power Company.

X.

The court erred in receiving in evidence, over the objection of the United States, page 7, paragraph 15 of the Progress Report of the International Waterways Commission, offered by the Chandler-Dunbar Water Power Company, which reads as follows:

"The quantity of water consumed in the operation of the canals during the eight months of navigation is about 1,200 cubic feet per

second. The quantity required in the future will be greater. Not less than four thousand cubic feet should be unconditionally reserved for canal uses, and in granting power privileges the respective Governments should not forfeit the right to increase the amount indefinitely. It may be remarked in passing that raft navigation over the rapids has so greatly diminished and is now so small in amount that the quantities of water above mentioned will suffice to provide for it. This leaves about sixty thousand cubic feet which may be temporarily used for power purposes."

719 XI.

The court erred in receiving in evidence, over the objection of the United States, extracts from page 9 of the report upon conditions existing at Sault Ste. Marie, with rules for the control of the same recommended by the International Waterways Commission, offered by the Chandler-Dunbar Water Power Company, which extract reads as follows:

"The interests constructing these works claim the right to do so not only under the permits granted, but, so far as the occupation of the bed of the rapids opposite the Chandler lands is concerned, by virtue of asserted riparian rights appurtenant to the ownership of the adjacent shore. In a litigation now pending, brought by the United States against the Chandler-Dunbar Water Power Company, in the Western District of Michigan, the District Court has decided that the ownership of the shore lands carries with it the title to the bed of the river, including Islands No. 1 and 2, and from this it follows that the right to erect structures in the river to utilize the waters of the river for power purposes as it flows past the riparian owner's land exists, subject merely to the restriction that the structures must not, directly or indirectly, injuriously affect navigation."

XII.

The court erred in receiving in evidence, over the objection of the United States, the evidence offered by the Chandler-Dunbar Water Power Company being an extract from the statement of the managers on the part of the House relative to the act of Congress passed in 1907, which is attached to the conference report relative to the river and harbor appropriation bill, which statement is as follows:

720 "Aside from items of appropriation, the two main differences between the House and the Senate were in the provision for the acquisition of necessary land for the construction of a canal in the St. Marys River, Michigan. Upon this an agreement has been reached, which is set forth in the conference report. The Senate provision sought to authorize the acquisition of all land and waters between the existing canal in St. Marys River and the international boundary line. The question of the acquisition of this land is much

embarrassed by conflicting claims of title. The provision as agreed upon provides for the acquisition of the land immediately needed for the new canal and lock appropriated for in this bill, but seeks to prevent the creation of rights which will hereafter embarrass the Government in case, as is probable, other canals and locks may be needed to meet the growing demands of traffic."

XIII.

The court erred in receiving in evidence, over the objection of the United States, a portion of the report offered by the Chandler-Dunbar Water Power Company of the chairman of the Committee on Rivers and Harbors to accompany H. R. 28243, 60th Congress, second session, which extract reads as follows:

"Section 11 and 12 provide for the acquisition of all private property in the St. Marys River, Michigan, between the present public works and the international boundary line. After full discussion and examination, it is the opinion of the committee that the acquisition of all private rights in this stream are essential, in order that the United States may be in a position to utilize this stream for the purposes of navigation. The traffic here is of enormous value. Additional locks and probably a forebay will be required, and the
721 growth is so rapid that any obstacle in the form of private rights is entirely undesirable. As there is a water power in this stream, a part belonging to the United States and part to be acquired by the condemnation of the private rights in question, the section provides that this water power may be conserved by the Government and used directly for its own purposes or leased by the Secretary of War."

XIV.

The court erred in receiving in evidence, over the objection of the United States, extracts from the rules and regulations adopted by the Secretary of War on December 12, 1902, relative to the permit of the Michigan Lake Superior Power Company to withdraw water from the River St. Mary, which were assented to by that company, and being at page 326 of the report of the Secretary of War for the year 1905, which extract reads as follows:

"Paragraph 8. That said company in its arrangement and construction of remedial works shall leave a suitable channel and water flow for the passage of logs over and through St. Marys Falls.

"9. That these limitations are in addition to the special limitations of the act of June 13, 1902, regarding riparian or other rights of any person or corporation and the remedies therefor."

XV.

The court erred in receiving in evidence, over the objection of the United States, the material part of a certain contract between the Sault Ste. Marie Bridge Company and William Chandler and Cata

O. Chandler, his wife, dated December 9th, 1890, offered by the Chandler-Dunbar Water Power Company, which reads as follows:

722 "The said Chandler gives and grants unto the company the right to construct and perpetually maintain the embankment aforesaid and its bridge across the St. Marys River, as well as to construct and perpetually maintain side tracks to his land as hereinafter mentioned.

"The said Chandler shall retain all riparian rights and privileges which were vested in him at the date of the said memorandum, subject, however, to the said right of the company to construct and maintain the said works as aforesaid, and he, his lessees, heirs, and assigns, shall also be entitled to make any canal, embankment, or other construction extending from his said land under any span of the said bridge, and of passing, repassing and laboring thereunder, and of taking material upon and from the said land under the said span, and of doing every other thing requisite and necessary for excavating, erecting or maintaining any such canal or construction: Provided, that the same shall be such as will not injure the said bridge or its piers or abutments, or the said embankment, and as will not interfere with the use thereof by the company."

Then follows a release of damages, and paragraph 4 is as follows:

"When any mill or factory or other place of business shall be erected on the said land by the said Chandler, his lessees, heirs, or assigns, the company shall on his or their written request construct a side track, and shall perform all the work and furnish all the material necessary therefor, extending from its main track upon the said embankment in manner following, that is to say: The company shall bear the expense of the construction of the said side track from its said main track to the land of the said Chandler, and shall also furnish at its own expense the rails necessary for the construction and maintenance of an extension of such side track upon and over the land of the said Chandler to the said mill, fac-

723 tory, or other place of business. The said Chandler shall bear the expense, except for the rails aforesaid, of the construction of the said extension of every such side track upon his land. The company shall thereafter at all times maintain and repair the said side track from its said main track to the land of the said Chandler, and the said Chandler shall thereafter at all times maintain and repair the said extension of the said side track upon his land, and shall allow the company, its successors and assigns, the free use of every such side track of extension as may be constructed on his land aforesaid, for all purposes connected with the business of such mill, factory, or other place of business, or of any other to which it may give access, and on demand will execute such further instrument (if any) as may be necessary to convey such free use: Provided, always, that all the railway companies which from time to time shall have the right to use the said bridge, shall have also the right to use the said side track or side tracks and exten-

sion or extensions, upon equal terms and in manner provided, and subject to the limitations and conditions, as far as applicable, for the general use of the said bridges in the act of Congress relating thereto, dated July 8th, 1882."

XVI.

The court erred in receiving in evidence, over the objection of the United States, a contract between the United States and the Sault Ste. Marie Bridge Company, dated the 27th day of September, 1910, offered by the Chandler-Dunbar Water Power Company, and which had not been executed by the Secretary of War. The material parts of which read as follows:

"The bridge company shall, at its own expense, replace the fill in its present bridge structure with a bascule bridge directly over the new canal now being constructed by the United States;
724 such bascule bridge shall allow a clear space over said canal of at least 318 feet.

"The United States shall fill the existing span in the bridge company's bridge next northerly of the said bascule bridge from the water to the level of the ties on said span, and the bridge company shall be allowed to remove said span.

"3. The United States shall be allowed to construct an approach to the said fill from the level of the banks of its canal with an opening through the north end of said fill for side tracks. When the said approach and the road bed for said tracks have been prepared by the United States, the bridge company shall place thereon the necessary ties and rails, properly ballasted, not exceeding three-quarters of a mile in all, and shall operate the same when desired by the United States at reasonable rates for the services rendered."

XVII.

The court erred in receiving in evidence, over the objection of the United States, a certain letter and memorandums attached thereto, offered by the Chandler-Dunbar Water Power Company, from Lieut. Col. Lydecker to Gen. Wilson, dated Sept. 10, 1885, the material extracts from which read as follows:

"The normal low-water discharge of the St. Marys River is, in round numbers, 60,000 cubic feet per second; and it is represented that the consumption of one-half this amount, or even more, is contemplated by the power company. The effect of crosscurrents generated in the navigable channel by the outflow and inpour of this large amount of water is an important consideration, as well as the effect on the regimen of Lake Superior."

Same contains—

725 "Petition of the Michigan-Lake Superior Power Company of Sault Ste. Marie, Mich., for permission to make, within the limits of the St. Marys River certain excavations and construc-

tions designed as a part of a hydraulic canal in course of construction at Sault Ste. Marie, and to utilize water from said river for the purposes of said canal."

Said petition said among other things:

"Your petitioner further represents that the enterprise of constructing said canal and the appurtenant structures will occupy a period of about two years, and that until the completion of the said work water cannot and will not be diverted from the St. Marys River.

"It is further represented that in addition to the works heretofore referred to your petitioner proposes, as an integral part of said undertaking, to erect in the bed of St. Marys River, between the intake and forebay, and in a location where the interests of navigation will not be affected or inconvenienced, such structures as will be required to make proper compensation for the increased outflow of the St. Marys River which will be created by the diversion of the volume of water needed for this hydraulic development and to preserve intact the present levels of Lake Superior and the St. Marys River."

It also contains report of Board of Engineers, Col. Lydecker, Col. Raymond, and Major Symons, to Gen. Wilson, Chief of Engineers, dated February 23, 1899, as follows:

"UNITED STATES ENGINEER OFFICE.
"*Detroit, Mich., February 23, 1899.*

"GENERAL: The Board of Engineers constituted by Special Orders, No. 28, Headquarters Corps of Engineers, United States Army, October 19, 1898, as amended by Special Orders, No. 6, January 18, 1899, to consider the project of the Michigan Lake Supe-
726 rior Power Company of Sault Ste. Marie, Mich., for the construction of a water-power canal, and to report as to the probable effect of the proposed canal upon the interests of commerce and navigation, has the honor to submit the following report:

"The Michigan Lake Superior Power Company represents that it is duly incorporated under the laws of the State of Michigan, with charter power (1) to construct and maintain, within the limits of the city of Sault Ste. Marie, Mich., a water power canal from a point above to a point below the rapids of the St. Marys River, and to own, use, and control the same for the purposes of supplying, upon an agreed rental, water power for manufacturing and other purposes, and (2) to divert into the canal, when constructed, waters from Lake Superior or the St. Marys River.

"The canal projected under this character is designed and proportioned to divert and use a constant flow of water amounting in round numbers to 32,000 cubic feet per second, the exact amount, as computed by the company's chief engineer, being 31,521 cubic feet. It is freely admitted that the water levels of Lake Superior would be seriously affected if its natural discharge should be increased by anything approaching this amount, and the company therefore pro-

poses to correspondingly reduce the natural discharge by erecting 'remedial works' in the St. Marys River at the head of the rapids, the specific project presented for this purpose being the submerged dam of stone-filled cribs, located on the Canadian side of the river.

"The blue print hereto attached shows the location of the proposed canal and remedial works, and also illustrates existing features or conditions which must be duly considered in this report, the principal ones being as follows:

727 "1. The American and Canadian ship canals, by which all commerce to and from Lake Superior must pass. The freight carried in this commerce during the navigation season of 1898, a period of eight months, was 21,234,664 tons, with a valuation of about $231,000,000. This is an increase of 2,251,909 tons and of about $12,750,000 over the corresponding amounts for the season of 1897.

"2. The Lake Superior Water Power Canal (in Canada) is a recent construction, which in its present condition furnishes the power for operating a paper-pulp mill, located at its lower end, and also for generating electricity, which is conducted to and used for operating the company's carbide works on the American side of the river. The amount of water now used is represented as being from 4,000 to 5,000 cubic feet per second, but the canal can easily be made of much greater capacity. This canal increases the natural discharge of Lake Superior by the amount of water that is taken through it.

"3. The natural channel north of Whitefish Island (Canadian side) has been adapted and used for water-power purposes by means of a dam erected at its outlet. This is not now in use for that purpose, but the conditions appear to be such as to admit of extensive development without increasing the natural discharge from Lake Superior.

"4. The Chandler-Dunbar Water Power Company is the riparian owner on the American side of the rapids from their head for a distance of 3,000 feet downstream. It has made large expenditures for improvements and thereby established a water-power plant which is utilized for supplying electric light and power for local public and private purposes. The company asserts absolute legal right to the use of all the water flowing over the rapids between the American shore and midstream without diminution or alteration except as required for the interests of navigation and commerce, and it

728 represents that it proposes eventually to utilize all the flow to which it is entitled. Application for authority to proceed with work having this object in view has been made to the Secretary of War and has been referred to the local United States engineer for report. The proposed development does not contemplate any increase in the natural discharge from Lake Superior.

"5. Jurisdiction and control over the waters of Lake Superior and the St. Marys River west in the United States and Canada, and in the matter now under consideration it is most important that the

limiting line to which each holds jurisdiction through the rapids should be definitely known; but the board has been unable to find any authorities or conclusive location of such line.

"6. The discharge of St. Marys River has not been measured at stages corresponding to the high and low water stages of Lake Superior, but from measurements made at intermediate stages it has been deduced that the low-water discharge is about 60,000 cubic feet per second and the high water discharge about 100,000 feet.

"After a full consideration of the existing features and situation as above outlined and more fully detailed in the memoranda herewith marked 'A,' and of all the papers, maps, and information which it has been able to obtain, the board has reached the following conclusions:

"The Chandler-Dunbar Water Power Company owns the land on the American side adjacent to the rapids of the St. Marys River, and claims to own and control the use of the water power of the river to the middle of the stream not needed for purposes of navigation. This ownership is asserted to be founded on common law and to be superior to any rights which can be conferred by State statute, such as that under which the Michigan-Lake Superior Power Company is operating. The ownership of the land on the Canadian side
729 of the river, equally and for the same reason, is believed to carry with it the ownership of the water power of the river and the falls to midstream.

"If these propositions are true, it is difficult to see where or how the Michigan Lake Superior Power Company gets any rights to the water power of the river and falls or how the company can carry out its plans without encroaching on the rights of others. It would seem as if this company should be required to quiet the claims of the owners of the water power under the common law before it proceeds with its work of deflecting the waters of the river into its canal. Otherwise it is reasonable to expect that at some time it might become involved in litigation and possible bankruptcy, and the care and maintenance of its works to conserve the interests of navigation would fall upon the United States or Canada, or upon both countries. It would therefore appear that the interests of the United States and Canada demand that in any case, before authority to proceed with its work be granted, the company should be required to satisfy the Government that it has a clear and unequivocal title to the water and the right to deflect the same. In this connection attention is respectfully invited to the statement of the Chandler-Dunbar Water Power Company, which is herewith marked 'B.'

"Furthermore, the board begs to state that it has examined the plans submitted by the Michigan Lake Superior Power Company for the remedial structures required to guard the interests of navigation, and is unable to recommend them for approval for the reason that the works are designed to be located on the Canadian side of the river, in whole or in part beyond the boundary line as this is popularly understood to be, where they would be beyond the jurisdiction

of the United States, and the power company has exhibited no authorization from the Canadian Government for their con-
730 struction or maintenance. And, moreover, the board invites attention to the fact that the plan proposed for these remedial works is largely based upon theoretical assumptions not fully established by observations, and the board is not satisfied that it is the best plan that can be devised for the purpose in view.

"For the reasons above set forth the board is unable to recommend the approval of the project submitted by this company.

"But other and more important considerations would prevent the board from recommending, under existing conditions, the authorization of any project involving modifications of the rate or volume of the discharge through the present cross section of the free waterway at the head of St. Marys Falls. It is evident that such modifications of the discharge might produce changes in the level of Lake Superior which would seriously injure the navigation interests, not only of the United States, but also of Canada. The danger of such injuries is greatest in projects proposing diversions of a portion of the flow from the present channel into new ones, diversions which be made either on the American or on the Canadian side of the falls with the consent of only one of the two Governments interested in the lake navigation. If any project modifying the volume or rate of discharge is authorized by either Government, it should be done under conditions satisfactory to the other, and the remedial works necessary to prevent injury to the interests of navigation should be designed, supervised, and controlled under regulations approved by both Governments.

"In view of the enormous commercial interests at stake, the board earnestly recommends that action be taken, through the proper diplomatic channels, for the formation of an international commission, composed of representatives of the United States and Canadian Governments, duly qualified to consider the intricate, legal, and engineering questions involved, to investigate the conditions governing the discharge of the waters of Lake Superior
731 at St. Marys Falls and their relations to the lake levels, to formulate the conditions under which the waters discharged may be utilized for the development of power without serious danger of injury to the interests of navigation, to definitely establish the boundary line through the rapids of the St. Marys River, to determine an equitable division of the water power privileges of these rapids between the two countries, and to recommend regulations for the guidance of both Governments in granting authority for the execution of projects involving changes in the rate or volume of flow and in providing for the construction, maintenances, and supervision of remedial works; this commission to report fully its conclusions and recommendations to both Governments for consideration and final action.

"The board is of the opinion that no project contemplating changes in the rate of volume of the flow through existing cross

section at the head of St. Marys should be authorized by either Government until international regulations as above suggested have been established by both Governments. It accordingly recommends that the petition of the Michigan Lake Superior Power Company be not granted.

"Respectfully submitted.

"C. J. LYDECKER.
"*Lieut. Col., Corps of Engineers.*
"C. W. RAYMOND,
"*Lieut. Col., Corps of Engineers.*
"T. W. SYMONS,
"*Major, Corps of Engineers.*

"Brig. Gen. JOHN M. WILSON,
"*Chief of Engineers, U. S. A.*"

Said letter was also accompanied by memoranda compiled by Lieut. Col. Lydecker for the use of the board, stating, among other things, the following:

"The condition of affairs now existing at the falls of the St. Marys River, briefly outlined, is as follows:

* * * * * * *

732 "(2) Adjoining the Canadian Ship Canal is a water power canal recently constructed by the Lake Superior Power Company, the capacity of which is reported to be about 4,000 to 5,000 cubic feet per second in its present condition; but this capacity may be greatly increased.

"(3) The channel north of Whitefish Island (Canadian side) has been adapted and used for water-power purposes by damming the outlet. This is not now in service, but it is easily of an extensive development.

"(4) The Chandler-Dunbar Water Power Company is the riparian owner on the American side of the rapids from their head for a distance of about 3,000 feet downstream. As such riparian proprietor, the company asserts title to the middle of the stream, and claims absolute legal right to its corresponding natural flow, without diminution or alterations, except as required for the interests of navigation or commerce. It has made large expenditures in improvements for developments, supplying the electric light and power required for local public and private purposes. The company represents that it proposes to make much more extensive developments in the near future and to eventually utilize all the natural flow to which its riparian ownership gives it legal right and title. Application for authority to proceed with this development has already been made to the Secretary of War.

"(5) The discharge of the St. Marys River has not yet been measured at stages corresponding to the high and low water stages of Lake Superior, but from measurements made at intermediate stages it has been deducted that the low-water discharge is about 60,000

cubic feet per second and the high-water discharge about 100,000 feet. The canal which the American Lake Superior Power Company proposed to build is designed to discharge about 32,000 cubic feet per second."

Such memoranda concluded with general remarks, including the following:

733 "3. The canal is designed to divert more than one-half of the natural low-water discharge from Lake Superior, and it is proposed to diminish the flow through the natural channel, via the rapids, by the same amount. Can this be done without seriously conflicting with the rights of property fronting on the rapids? The act of the State of Michigan under which this water power company is incorporated purports to give it the right 'to divert waters from Lake Superior or St. Marys River * * * subject to the consent of the board of supervisors of the proper county in which said waters so diverted are situated.' But this can hardly be construed as authorizing the company to erect works in the bed of the river, remote from their own property, and thereby prevent a like amount of water from continuing to flow by or over another person's property without his consent.

"4. The St. Marys River being the boundary between the United States and the Dominion of Canada, it is presumed that each country has proportionate jurisdiction concerning the use and control of its waters. The uncertainty respecting the location of the territorial boundary line is referred to in paragraph 6 of the above memoranda; but does the location of this line determine the volume of water which each country would control for water power purposes, or is each country entitled to an equal division of the total water-power flow, independently of how that flow is divided by the territorial boundary line?"

Said letter was also accompanied by letter of Jos. Ripley, assistant engineer to Col. Lydecker, dated Oct. 4, 1898, stating, among other things:

"It seems to me that a board of United States and Canadian engineers should be appointed to study and determine the structures necessary to maintain the present normal stage of Lake Su-

734 perior. It is probable that a system of submerged weirs and movable dams will be necessary, and their probable location will be at the head of the rapids and, possibly, the main part of them on the Canadian side of the river. Also the question of the extent and character of development which will be permissible in the rapids of the partial development of the power in the rapids will be an ever-recurring one."

XVIII.

The court erred in receiving in evidence, over the objection of the United States, an order of the Secretary of War made the 12th

day of December, 1902, offered by the Chandler-Dunbar Water Power Company, reading as follows:

"Now, therefore, this is to certify that the Secretary of War hereby approves the said plans (relating to the Michigan-Lake Superior Power Company's plans) which are hereto attached, and hereby gives his consent to the diversion of water from the St. Marys River, as authorized by said act, subject to the acceptance of said company of the following conditions: The first we will pass.

"'Second. That when the mean level of Lake Superior at the canal for any calendar month falls below 601.5 feet above mean tide at New York, according to the levels of the United States Survey Office, the flow through the channel shall be reduced, the amount of reduction increasing as the monthly mean falls, until it reaches 601.0, when all flow shall be stopped until the monthly mean level again exceeds 601.0, all without claim against the United States or against any officer thereof.

"'3. That in addition to the requirements of condition 2 (supra) all flow shall likewise be stopped without claim against the United States or against any officer thereof.

"'Should the mean monthly level of the lake remain below 601.5 for a period of six consecutive calendar months, and
735 shall not be resumed until the monthly mean level shall exceed 601.5.

"'4. That when the monthly mean level rises about 603.0 the flow through the canal to the remedial works shall be increased to their maximum capacity and shall so continue until the monthly mean level shall be less than 603.0, without claim against the United States or against any officer thereof.'"

To the same point, from the report of the existing condition at Sault Ste. Marie by the International Waterways Commission, dated May 3rd, 1906, on page 17, paragraph 4. Recommendations:

"The level of St. Marys River above the rapids shall be maintained between the elevation 601.7 and 603.2 feet above mean tide at New York, according to the system of levels established by the United States Government in 1903 and defined by a bench mark on the coping of the Weitzel Lock, at Sault Ste. Marie, Michigan, the elevation of which is 606.069. The approval of the plans of work by the commission and the consent of the Secretary of War and minister of public works to construct works or to use or divert water shall in no way relieve the owners and persons operating such works from the duty of maintaining said level."

XIX.

The court erred in receiving in evidence, over the objection of the United States, chapter 88 of the Laws of Ontario for the year 1889, p. 310, offered by the Chandler-Dunbar Water Power Company, the material parts of which read as follows:

"An act respecting the Ontario and Sault Ste Marie Water, Light and Power Company and the town of Sault Ste. Marie.

"Whereas the Sault Ste. Marie Water, Gas and Light Company has been incorporated * * * for the purpose of supplying the municipality of the town of Sault Ste. Marie with both water and light, and the council of the corporation of the town of
736 Sault Ste. Marie have passed the several by-laws and entered into the several contracts and agreements * * * and whereas the said company alleges that it will materially assist them in carrying out their said contracts with the said municipality and enable them to supply both water and light at such lower rates, if increased powers be granted to them to enable them to avail themselves of the water from the rapids of the St. Marys River for power and other purposes generally, as well as for water works and water and light purposes; and whereas * * *

"Therefore, Her Majesty, by and with the advice and consent of the Legislative Assembly of the Province of Ontario, enacts as follows:

"1. The name of the Sault Ste. Marie Water, Gas, and Light Company is hereby changed to, and the said company shall be hereafter known and designated as, the Ontario and Sault Ste. Marie Water, Light and Power Company.

* * * * * * *

"4. After having acquired the land or property necessary for the carrying out of the works hereinafter mentioned, the company shall have the power to erect, construct, and maintain a dam or dams across the inland channels or rapids of the St. Marys River, or of any branch thereof within the province of Ontario, and also to conduct water from the said river and the various branches thereof, and streams entering therein by canals or flumes to be made by the company at any place on the said rapids along the shores thereof for hydraulic purposes, and may also construct all necessary locks, piers, wharves, and other works on the canals, and may extend its works into, and take possession of the bed and beach of the said St. Marys River at the entrance of the canals or flumes, and for the conditions of the same in their entire length, and at any point at which
737 it may be found expedient to provide an outlet or outlets for the waters of the canals or flumes or tailraces for water powers taken from the said canal or flumes; * * *

"7. The company may use, sell, lease, and otherwise dispose of the surplus water from the dams, flumes, raceways, or canals which it does not require, but which might be found useful and applicable to drive any machinery in mills, warehouses, and factories, and may purchase, acquire, hold, or possess lands along the sides thereof, and down to the river, and may sell, dispose of, or let and lease the said lands with or without water power, on such terms and conditions as they may think fit."

XX.

The court erred in receiving in evidence, over the objection of the United States, chapter 119 of the Laws of Ontario for the year 1895

(p. 681), offered by the Chandler-Dunbar Water Power Company, the material parts of which read as follows:

"An act respecting the town of Sault Ste. Marie, the Ontario and Sault Ste. Marie Water, Light and Power Company, the Lake Superior Power Company, and the Tagona Water and Light Company.

* * * * * * *

"6. The name of the Ontario and Sault Ste. Marie Water, Light and Power Company is hereby changed to, and the said company shall hereafter be known and designated as, 'The Lake Superior Power Company,' and the said company shall have perpetual succession."

XXI.

The court erred in receiving in evidence, over the objection of the United States, the decision of the commissioner of the General Land Office, offered by the Chandler-Dunbar Water
738 Power Company, on the application of Wm. B. Cady to make an entry on Portage Street.

XXII.

The court erred in receiving in evidence, over the objection of the United States, a letter dated February 22, 1906, and also a letter of April 24, 1907, and a letter of May 3, 1907, offered by the Chandler-Dunbar Water Power Company, relating to quitclaim deed to the United States and railroad right of way, which letters are as follows:

"FEBRUARY 22ND, 1906.

"Mr. JOSEPH RIPLEY,

"*General Supt. and Engineer in Charge,*

"*St. Marys Falls Ship Canal, Sault Ste. Marie, Michigan.*

"DEAR SIR: I am in receipt of your communication of the 10th inst., in reply to mine of the 8th inst., together with the blue print to which reference is made, in which you ask for a very large increase in the amount of land deemed necessary for the possible Government requirements. Your previous request was for 5.372 acres and you now want 8.75 acres.

"The blue print, showing a study for the location of proposed locks, revetment piers, etc., indicate that your request may not be an unreasonable one; therefore, the Chandler-Dunbar Water Power Company will make a conveyance of the tract described as containing 8.75 acres, more or less, to the United States, upon practically the same terms as outlined in my previous correspondence, excepting and reserving, of course, all the riparian rights outside of the lines of the lands conveyed.

"Upon the lands you desire is located our railroad siding
739 track, connecting our works and proposed works with the main line of the Canadian Pacific Railroad. We should desire the United States to construct an embankment for a new siding to

take the place of the one there, and to remove the railroad siding to the new location made necessary by the change proposed. The new location of the track would of necessity be partly on the west of the present Canadian Pacific embankment, the making of which would require quite a fill. This, I understand, could be done quite advantageously for the refuse of the proposed canal excavation. We should desire that the exterior limits of this fill, where the depth of water is such as to require it, should be retained in position by cribwork. We would also desire the Government to extend our steel conduit for electric cables, across the land conveyed, or such parts of it as the construction work of the Government would require, and put the same in condition for use.

"We would also desire to occupy the lands so granted not immediately required by the Government, under lease for nominal rent, until such time as this company can get its works now under construction farther out in the river completed, and until the land is required for Government purposes, and also the right to remove any of our buildings from the same.

"I enclose you a deed covering the land you describe as necessary for canal purposes, properly executed by the Chandler-Dunbar Water Power Company, conveying the same to the United States of America.

"Very respectfully,

"THE CHANDLER-DUNBAR WATER POWER CO.,
"By WM. CHANDLER, *President.*"

740 The letter of April 24, 1907, is as follows:

"UNITED STATES ENGINEER OFFICE,
"*Sault Ste. Marie, Michigan, April 24, 1907.*

"Mr. WM. CHANDLER,
"*Prest. Chandler-Dunbar Water Power Company,*
"*Sault Ste. Marie, Mich.*

"DEAR SIR: I have received your letter of April 17th declining to return the quitclaim deed offered to the United States in February, 1906, on the ground that conditions have materially changed since that time. Your offer, however, to submit a proposition by which the lands actually needed for the widening and improvement of the canal under present plans will be conveyed to the United States is noted, and in accordance with your suggestion I enclose herewith a blue-print map showing such lands, the description of which by metes and bounds is as follows:

"All those certain pieces or parcels of land situated in the city of Sault Ste. Marie, county of Chippewa, and State of Michigan, forming parts of private land claim No. 95, No. 96, north part of claim No. 3, northeast part of claim No. 3, part of claim No. 4, and part of claim No. 5, village lot No. 3, and part of the Indian reservation, described as follows, to wit:

"Beginning at the intersection of the north boundary line of the canal reservation with the principal meridian of Michigan, thence

along said boundary line of canal reserve, as determined by the Whelpley survey of 1854–5, No. 85 degs. 23′ E. 2,449.25 feet (to the easterly boundary of the Chandler-Dunbar Water Power Company's land), thence S. 89 degs. 40′ 21″, W. 1,821.50 feet, thence S. 85 degs. 23′, W. 557.1 feet, thence S. 89 degs. 40′ 21″, W. 601.91 feet, to the westerly boundary of claim No. 95, thence along westerly
741 boundary line of said claim S. 45 degs. 13′, W. 95.14 feet, thence S. 74 degs. 54′, E. 276.54 feet, thence S. 87 degs. 16′, E. 207.9 feet, thence No. 85 degs. 23′, E. 130.68 feet to the place of beginning, containing 6.52 acres, more or less.

"In connection with your proposition, will you also please submit such information as you may have regarding any incumbrances on the title to the land in question, which you have not been able to clear.

"Yours, very respectfully,

"(Sd.) L. C. Sabin,
"*Assistant Engineer.*

"1 enclosure."

The letter of May 3rd is as follows:

("The Chandler-Dunbar Water Power Co., Sault Ste. Marie, Mich. Wm. Chandler, pres.; H. T. Dunbar, vice pres.; S. C. Carlton, treas.; D. B. South, secy.)

"May 3rd, 1907.

"Mr. L. C. Sabin,
"*Assistant Engineer, Sault Ste. Marie, Michigan.*

"Dear Sir: I beg to acknowledge the receipt of your letter of April 24th, 1907, with enclosure, asking for the submission of a proposition under which such lands as are now needed for the widening of the St. Marys Falls Ship Canal according to present plans would be conveyed to the Government.

"In reply I would say that the lands described in your letter, and shown on the blue print accompanying the same, will be
742 conveyed to the Government substantially in accordance with my communication of February 22nd, 1906, which was accompanied by a deed which was not accepted. Conditions have, as you have aware, changed since the former deed was tendered and declined, which render some changes in the conditions of acceptance of such conveyance desirable.

"I herewith enclose you a quitclaim deed for the nominal sum of one dollar, running to the United States, for the lands at present desired for canal widening for your consideration.

"Should the deed be accepted, I desire that the steel conduit running under the present canal, and conveying the transmission lines of the Edison Sault Electric Company, should be extended beyond the width of the widened canal to the south boundary of our land at the expense of the Government, and to use and make necessary repairs on the said conduit.

"The width of the land covered by the enclosed deed, as shown on the map, takes away our railroad siding, and renders it impossible to bring down the siding upon our remaining lands. Therefore I desire the Government shall provide the proper fill and grade or trestle for the shortening of the present curve, and transfer the present railway track and provide for carrying the tracks of the Edison Sault Electric Company and of this company near the lower end of the property; and that these companies be allowed to maintain and use the tracks in this position until such time as the construction of the proposed new canal to the north renders the land thus necessary for canal construction, at which time the track may be removed. It is understood that the Government, for its own, shall have joint use of the said track. The shortening of the curve, above noted, will prevent a railroad engine running over the siding. It would therefore be necessary to provide for the erection of a trolley line over the track, and for the movement of the cars both to and from
743 the main line with an electric trolley car. In the erection of the trolley line the Government shall erect the poles and the Chandler-Dunbar Water Power Company put on the trolley wire.

"Looking forward to the possibility of the Government in the near future acquiring lands for the construction of a new canal to the north of the present one, which would take all the mainlands of this company not under water, I desire that the Government should, with the material excavated from the lands conveyed by the accompanying deed, fill a tract of our submerged lands from the west of the international bridge and to the north of the line bounding the lands needed for the proposed new canal, that there may be some land to which may be removed our warehouse building and upon which a new railroad siding may be constructed. This fill should be constructed upon the river side, with piers made of timbers or of selected stone, so that the action of the water should not wash down the slope of the shore and carry the material in to our factory. If the slope is made of stone, it should be of material that will stand at a slope of one to one. The approximate territory covered by this proposed fill is shown upon the blue print accompanying this letter.

"Regarding your request for information in reference to incumbrances on the title to the land, I would say that I believe we have a good title to all the land that the Chandler-Dunbar Water Power Company owns, although not a title that is unassailable. We only claim to own an undivided one-half interest in the part of private land claim No. 3, lying north of the St. Marys Falls Ship Canal. There will be found a lis pendens on private land claims Nos. 95 and 96. The title to these tracts of land has been decided twice in our favor by the Circuit Court for the County of Marquette, and one by the Supreme Court of the State. There possibly may be some questions regarding the title to a small interest in private land
744 claim No. 4, lying north of the ship canal, and I believe the title is good. However, I would suggest that the United States attorney, should the question of these titles be referred to him, confer

with the attorney of the company, Mr. J. H. Goff, Union Trust Building, Detroit, who has gone into these titles exhaustively, and whom, I am sure, will give all the information in his power. There is also a suit pending in the United States courts between the United States and the Chandler-Dunbar Water Power Company which reflects upon the title of the so-called Indian reservation. As this suit has already been decided by the United States District Court and the United States Circuit Court of Appeals in our favor, I can not but think that the title is reasonably good to this portion of the land conveyed.

"Respectfully,

"CHANDLER-DUNBAR WATER POWER CO.,
"By WM. CHANDLER, *President*."

XXIII.

The court erred in receiving in evidence, over the objection of the United States, a letter offered by the Chandler-Dunbar Water Power Company, dated January 2, 1908, to William Livingstone from Col. Davis, which letter reads as follows:

"WAR DEPARTMENT,
"UNITED STATES ENGINEER OFFICE,
"*Jones Building, Detroit, Mich., January 2, 1908.*

"Mr. WILLIAM LIVINGSTONE,
"*President of Lake Carriers' Association,*
"*Detroit, Michigan.*

"SIR: In answer to your telephone inquiry of December 31st, 1907, as to the present status of the widening of the upper
745 canal at Sault Ste. Marie, Mich., I have to say:

"1st. The river and harbor act of March 3, 1905, authorized the expenditure under continuing contract of $1,020,000 for widening the upper entrance to the present canal in accordance with the project submitted in House Document No. 215, 58th Congress, 3rd session. Of this $1,020,000.00 there remains to be appropriated $250,000.00. This money was to be expended in rock and earth excavation, concrete revetment walls, timber, piers, filling, movable dams, including head gates and superintendance and inspection, all in accordance with the project above mentioned.

"2nd. Negotiations for obtaining the land needed for the widening began at once, and as a suit was pending in the United States Circuit Court to quiet title to Islands Nos. 1 and 2, owned by the Chandler-Dunbar Water Power Company, the Department of Justice advised that no steps be taken to acquire the land until this suit was decided, so the season of 1905 was wasted. In November, 1905, I opened up the question of the land needed, and on March 5, 1906, I obtained a quitclaim deed for the nominal consideration of one dollar, and Mr. Chandler was notified March 21, 1906, that the War Department accepted the deed. The deed was returned August 8, 1906, with the opinion of the Acting Attorney General, who found

various incumbrances. These incumbrances were purely technical, and much time and money were expended by the Chandler-Dunbar Company in the effort to remove them, but unsuccessfully, and another season's work was lost.

"Finally, a second quitclaim deed was prepared for the same nominal consideration and forwarded to Washington May 10, 1907, but was not acted upon by the Department of Justice until November 25, 1907, and then unfavorably, and the papers have only recently been received back by me. So a third season has passed and we are apparently no nearer a settlement of this question
746 than we were at first, so far as the Department of Justice is concerned.

"In anticipation of a speedy decision in the matter, for it seemed to me it would be looking a gift horse in the mouth to raise technical objections, points against a gift of very valuable property for which the Government might have been asked a large sum of money, I prepared specifications for the widening in May, 1906, and bids were opened July 24th of the same year. Six bids in all were received, ranging from $975,200 to $552,530. As the lowest figure was an exceedingly favorable one for the United States and within the estimates, I recommended its acceptance.

"August 3, 1906, the Engineer Department notified me that action on my recommendations would have to be deferred until the question of title was settled. The successful bidders were notified of this decision, and as no settlement was reached, all bids were rejected September 24, 1906. In the meantime, a good deal of work has been done; a coffer dam has been built around the portion of the work that can be done in the dry, the concrete abutments and foundations for the movable dams—estimate to cost $400,000—have been completed as far as they can be before the erection of the steel swing bridge forming the dam proper, specifications for the steel work prepared, and probably the bids for this work will be solicited in February next.

"3rd. The conditions of the appropriation is in round numbers as follows:

On hand from previous appropriation	$308,000
Already appropriated	770,000
Yet to be appropriated	250,000
Total	$1,328,000
Expended up to date	179,360
Balance	$1,148,640

747 "You will, therefore, see that, so far as this office and the Engineer Department are concerned, every effort has been put forth to start this important public improvement.

"You are at liberty to publish this letter in full; in fact, I should prefer it rather than a brief summary.

"A copy of this letter has been sent to the Chief of Engineers.

"Very respectfully,

"CHARLES E. L. B. DAVIS,

"*Colonel, Corps of Engineers, U. S. A.*"

XXIV.

The court erred in receiving in evidence, over the objection of the United States, a letter, dated September 18, 1908, offered by the Chandler-Dunbar Water Power Company, which letter reads as follows:

"SAULT STE. MARIE, MICH., *Sept. 18, 1907.*

"Col. CHARLES E. L. B. DAVIS,

"*Corps of Engineers, U. S. Army, Detroit, Mich.*

"(Through L. C. Sabin, Assistant Engineer, Sault Ste. Marie, Mich.)

"SIR: We have your letter of July 23, 1907, wherein you request the Chandler-Dunbar Water Power Company to state on what terms it is willing to deed to the United States the land needed for new canal and new lock, viz, the land northward, toward the St. Marys River, exclusive of the land already deeded for this widening, and including land which, as you intimate, will be required in the future for the construction of another lock.

748 "The Chandler-Dunbar Water Power Company and its predecessor in title have, for twenty-five years, been willing to give to the United States their main lands and so much of the adjoining subaqueous lands for navigation purposes as could be parted with while retaining the appurtenant water power and a suitable seat for the improvement and use of the same. During this time extensive and valuable improvements have been made on the lands now desired by the United States. In parting with these improvements, the United States will be asked to provide for the duplication of the same as near as may be farther out in the river, and otherwise compensate for such available improvements as can be duplicated; or in other words, as nearly as possible under the new conditions now contemplated, to place us in as good a position as our legal rights and our equities entitled us to be at present.

"In consideration for the lands desired, which are very valuable to us for water power purposes on account of their riparian rights, authority will be asked to excavate tail races in the St. Marys Rapids below our property of sufficient capacity to carry water from any water power machinery we may install.

"Respectfully,

"THE CHANDLER-DUNBAR WATER POWER COMPANY,

"By WM. CHANDLER, *President.*"

XXV.

The court erred in receiving evidence, either documentary or oral, tending to show that the respondent, Chandler-Dunbar Water Power Company, had any claim, legal or equitable, against the United States, and in considering any legal or equitable claim, if such there was, on behalf of the Chandler-Dunbar Water Power Company and against the Government.

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XXVI.

The court erred in overruling the objection of the United States to the following question asked the witness, L. C. Sabin, by the Chandler-Dunbar Water Power Company:

"Q. Have you a plan for the improvement of the river made since the taking of the property, to the international line?"

To which question, over the objection of the United States, the witness answered:

"I have a plan for the improvement of the river in respect to water power made since the taking of the property, plans for building a head race from the bridge downstream to about opposite the present plant of the Edison Sault Electric Company, forming a head race, which may be used for taking the water to the present power plant of the Edison Sault Electric Company, and for filling locks and other things of that sort. I have a map showing these plans.

"(Map introduced in evidence by defendant, and marked 'Defendant's Exhibit 29.')

"The plan represents a sheer dam or wing wall or dike running from about the north end of the present Edison Sault improvement northwest to a point a few hundred feet above the railroad bridge. It strikes the railroad bridge at the fourth pier above the abutment. The plan for this work includes this head race and many other things, a new navigation canal west of the bridge, building of side walls, and timber pier out beyond the limits of this map. The total amount to be paid is five or six hundred thousand dollars. We don't know how much excavation will be removed in this area marked 'New head race.' It wasn't a flat bid to do the business, but a
750 bid by the cubic yard, of excavation, 80 cents, I think; construction of dikes, $8.50 per linear foot. It was in my mind, in my original plan for this work, that it should be used to a certain extent for navigation. The idea of this development is to permit power to be developed in the Edison Sault Power plant; but before saying that I will say that it was intended to use this power plant to operate the locks—a portion of it. There is also the possibility of using this new head race as a fore bay from which to fill the new locks, but this plan does not indicate it. This plan simply shows this head race that is under contract. We are not ready to connect that head race with the locks, and may never do so, but that might be developed. The locks could be supplied from the navigation canal, as the present locks are supplied, but the question has arisen whether supplying large locks of that kind from the navigation canal, whether it would produce currents which would be deleterious to navigation interests."

XXVII.

The court erred in receiving in evidence, over the objection of the United States, the testimony of the witness, L. C. Sabin, touching the

subject of the necessities of navigation as correlated to the subject of water power, as follows:

"The passage of logs over the rapids would be considered navigation, and the regulation of Lake Superior and St. Marys River would be called works of navigation. It takes 1,600,000 cubic feet for each lockage of the Poe Lock. Considering that the fall is 20 feet, a variation from 19 to 20 feet, the number of lockages in 1909 was about 5,000; that means the number of times that the locks were filled or emptied with boats on them. If the traffic were always
751 alternated, one boat up or one lock full of boats up and then a lock full of boats down, we would have one emptying of the lock for each of two lockages. As a matter of fact, the traffic is not so regulated, and I should think that between two-thirds and three-quarters of these 5,000 lockages would be a fair number to take in figuring the amount of water consumed; so that it would be 1,600,000 cubic feet multiplied by 5,000 lockages multiplied by two-thirds or three-quarters. It is not possible to give that without a good deal of work, to get that accurate. The volume per second for the time of navigation I could only give within wide limits. I haven't it in my mind, and I have not my notes. I have computed it, but it is not even in town. Other than the operating of the locks, land and water might be required for regulating works, regulating the levels. That would be called a cross dam across the river, or it might be a dike diverging from the American side to the Canadian side. I believe it is practical to build works in the rapids so as to control the outflow of Lake Superior and equalize the flow.

"The COURT. You include, perhaps, with the concurrence of the Canadian Government?

"Mr. HOOPER. Yes, sir; their works are already in.

"A. If you include excavation in the term construction it would I think be possible to equalize the flow. I think excavation would be necessary in order to increase the available discharge area at times when the water went extremely low, because an equalization of the flow would mean a very great disturbance of levels, and the water level to equalize the flow would do lower than it does at present. If I were going to design such works, I should try to find out how much had been the average flow out of Lake Superior for the last 40 or 50 years, or as long as I had records, and plan my works to pass that flow at any stage which such flow might give to
752 Lake Superior, and in order to do it I would have to excavate at the head of the rapids, I think. I don't say it would be physically possible for an engineer to say to-day what flow he would have to provide for in order to forever afterwards have it that the flow from Lake Superior should be the same, but he could arrive at it approximately by knowing the conditions that had prevailed in the last 50 years. If the flow must be increased over the amount which he had arrived at as a mean, then the proposition fails, and he has not equalized the flow. Arrangements might be made by excavation so that extraordinary amount of water might be discharged

if that emergency arose. During the last season of navigation the greatest amount of freight passed through the Sault locks, I mean the season of 1910, 62,363,218 tons. A lock of the capacity of the new third lock would take a space of about 150 to 200 feet in width. The distance between the possible fourth lock and the international boundary line is about 1,200 feet. Remedial or intercepting works might be located at various points along the rapids, and they would consist of a dam with openings through it and gates to control the flow of water through those openings. I don't know that the head of the wing dam or dike to the Canadian intercepting works. It could be done that way. Such a dike might be carried across either there or downstream from there out to the location of what we call the east line of the Chandler-Dunbar property. If you carried a dam across at the east line of the Chandler-Dunbar property, you would have to build a heavier wall. You would be in deeper water or a lower level. In addition to that, you would have from the north end of your dam to carry up a wing wall or dike to the Canadian works. It would be the cheapest plan to carry the wall directly across from the head of the proposed dike to the Canadian works, but it might be advantageous to put it lower
753 down to save excavation, and the upper one would save masonry. To some extent the works would operate as compensating works to the draft of the water through the Michigan-Superior Power Company's canal. If the full amount of water which would ordinarily flow through the spans included in the head race were not taken through that head race, then to that extent they would be compensating works for water taken at other places. The only power development at present on the American side are the Edison Sault and the Michigan-Lake Superior."

XXVIII.

The court erred in receiving in evidence, over the objection of the United States, the testimony of the witness, L. C. Sabin, offered by the Chandler-Dunbar Company, as follows:

"I don't remember what the letters indicated respecting the quitclaim deed so as to furnish a foundation for a railroad track. Supposed that it had been made about as indicated in those letters. At the same time it is not sufficient at present to make a railroad siding, but there is no practical difficulty in filling it to that extent and putting the railroad siding on it.

"(Respondent's counsel produced a map marked 'Respondent's Exhibit 17.')

"The yellowish strip on this map probably indicates the land purchased from the Chandler-Dunbar Company for the canal widening covered by that quitclaim deed. The narrow red lines indicate a railroad which has been in existence in the past at one time or another. It would be possible to put a railroad track on the line represented by the double black line. There are no physical conditions

that I know of that would interfere with its construction. It would not be expensive to make that filling in shape for a side track.
754 If the property north of the strip claimed by the United States had not been taken, it would have been practicable to have put on a side track for cars to any point in the rapids north of the Edison Light Company's plant without interfering with any Government property which was then Government property. I mean that railroad that you have pointed out here about on the line indicated by this double black line."

XXIX.

The court erred in overruling the objection of the United States to the reception in evidence of the testimony of Leonard H. Davis, offered by the Michigan-Lake Superior Power Company and the St. Marys Power Company, which reads as follows:

"I am the engineer of the Michigan-Lake Superior Power Company, and also engineer for the Canadian interest at the Sault, and have been for some time. Am familiar with physical conditions and water conditions there. The capacity of the Michigan-Lake Superior Power Company Canal is 32,000 cubic second feet. It is designed to operate under a head of 16 feet, and it is expected that there will be about 40,000 horsepower available. Island No. 5 has a fall appurtenant to it of approximately two and a half feet on the shore line, and varying somewhat from that amount as the water surface progresses northerly toward the international boundary. The average fall is probably about two feet. That makes a substantial proportion of the total fall of the rapids. The whole fall of the rapids is about nineteen and a half feet. While Island No. 5 is very small in itself, it is about nine to ten per cent of the whole, and any project that was built there would have to use that fall in order to operate at its best capacity. Consequently, Island No. 5 has a substantial value contributing the economical development of a
755 power plant in the rapids. The effective fall without Island No. 5 would be 15 or 16 feet. With Island No. 5, 18 or 19 feet. I should say the value of Island No. 5, considering it as a proportion of the whole fall, would be about $50,000. Have had charge of the power canal of the Michigan-Lake Superior Power Company since 1903, and of the Canadian Power Canal since 1901, and have also made a number of examinations of water power in Ontario, Quebec, and New England. The flow given in the report of the conference of engineers as applicable to the Michigan-Lake Superior Power Company was 12,300 cubic feet per second. That flow is substantially correct for the time at which the measurements were taken, namely, in August, I think, 1909. It represents, however, the maximum flow that was ever passed through the power canal of that company; and the average flow through the canal since the first of January, 1908, is as follows: For the year 1908, 10,450 cubic feet per second; for 1909, 7,210 cubic feet per second; for 1910, 8,000

cubic feet per second; an average for the three years of 8,560 cubic feet per second. The actual capacity of the canal is 32,000 cubic feet per second."

XXX.

The court erred in overruling the following motion made by the Government at the close of the proof:

"COUNSEL FOR THE GOVERNMENT. We now move to strike out all the testimony bearing upon the value of water power in the River St. Marys appurtenant to the property of the Chandler-Dunbar Water Power Company's land, for the reasons that the water power appurtenant to said land is not the private property of the said Chandler-Dunbar Water Power Company as against the Government in this proceeding, the usufruct of the water and the subaqueous land is the public property of the Nation and no
756 vested interest therein against the sovereign can be acquired by the riparian owner, for the further reason that, under Art. I, section 8 of the Constitution of the United States, the amount of water and subaqueous land needed for navigation purposes is exclusively within the dominion and control of Congress, and Congress acting under such power and authority has determined in sec. 11 of the act in question that all of such subaqueous land and all of the waters of the St. Marys River are needed for navigation purposes, and such declaration is final and binding and is not subject to judicial review."

XXXI.

The court erred in overruling the following motion of the Government at the close of the proof:

"COUNSEL FOR THE GOVERNMENT. We make the same motion with reference to Island No. 5, and to the reasons already given we add that the undisputed testimony shows that the water power appurtenant to Island No. 5 is not of any commercial value in and of itself."

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XXXII.

The court erred in finding as a fact so much of finding of fact number nine (9) as reads as follows, viz:

"As to the submerged lands out to the boundary, the matter is not so clear. A large part is clearly not directly necessary at present for the needs of navigation; but such part is so connected with, and incidental to, the other directly and present necessary portion as to be affected by, and brought within, the same prevading necessity, and as to make it proper for Congress to take the whole. * * * The necessity for taking all, as applied to the facts here, is a necessity of peculiar character. It may be called a constructive as distinguished from an actual necessity. As to the excess beyond a certain amount of land and water, the taking is secondary and incidental to the taking of the primary body now needed."

XXXIII.

The court erred in finding as a fact finding of fact number fourteen (14), which reads as follows:

"There is a present established demand for a comparatively small amount of the raw (unimproved) power. The natural increase from the ordinary growth of the community will not more than counterbalance the loss when the Government construction work ceases. Any further demand must be created by the promotion of power-consuming concerns. The plan for promoting or securing a wood pulp mill which would consume all the unavailable power, storing, if necessary, its surplus product during the high water, is feasible, and is reasonably probable of execution. Such probability is sufficiently definite and certain to justify the conclusion that all the power has a definite value, instead of the conclusion that most of it is too speculative for computation; and I adopt the former
758 conclusion as the fact. I fix the annual value of the raw power, per theoretical horsepower, as follows: For the first 3,000 h. p., $10.00 each; for the second 3,000 h. p., $7.50 each; for all beyond 6,000 h. p., $5.00 each. The cost of development, so far mas, should be added. These values are on the basis of a perfect and unincumbered right to the water."

XXXIV.

The court erred in finding as a fact finding of fact number twenty (20), which reads as follows:

"The present use of the water in direct aid of navigation is only for filing and operating locks and for floating a few logs. The best expert judgment, both of the Waterways Commission and of the witnesses in this case, is that 4,000 c. s. f. is the maximum amount which will ever be needed for these purposes; and therefore the amount to be needed for navigation, so far as the same can now be definitely determined, must be fixed at this figure, leaving the balance beyond need for navigation. I think, however, that owing to all the contingencies involved, it is impossible to fix this amount with sufficient certainty to make any definite finding of fact relating thereto, except as in this and in other paragraphs stated."

XXXV.

The court erred in finding as a fact so much of finding of fact number twenty-nine (29) as reads as follows:

"The railroad affords access to the upland for heavy traffic, and the maintenance of a side track into this property was one of the things expected and arranged for when the quitclaim deed of January, 1908, was given. Claims 95 and 96 give full access to
759 deep-water navigation on Lake Superior. Transmission wires for electricity could cross the canal, as is now done by conduit under the same, without any prejudice or injury to the public use of the canal."

XXXVI.

The court erred in finding as a fact finding of fact number thirty-four (34), which reads as follows:

"For about twenty years the Chandler-Dunbar Water Power Company, or its predecessors, or some one claiming under it, has been developing power at this part of the rapids. This was accomplished by a short transverse dam near the lower boundary of its land, extending out a short distance into the stream and then extending up along the bed of the stream (substantially) parallel to the bank up to the head of the rapids. This dam or wall, toward its upper end, diverged out into the stream the better to divert water into the head race and into the forebay formed by its lower part. Earlier structures of this character were replaced about 1901 by those more extensive ones which existed when this condemnation was made. While considerable in extent and cost, they are inconsiderable as compared with the structures now proposed to utilize the whole power, and they were, comparatively speaking, along the bank rather than across the stream. Development of power thereby would be subject to some of the special objections and difficulties which have been noted, but to many and perhaps the majority of such objections it would not be subject, or, if subject thereto, would be so in a degree very much less than the proposed plan for entire development. From year to year these developers have added to their investment relating and depending thereon until such improvement, at the time of this taking, amounted to approximately $500,000.

760 The public lighting of the city of Sault Ste. Marie and the maintenance of various industries there were dependent on the power so developed. The United States itself, or contractors working on its public works, has for some years taken electric power from this source and paid therefor to those private parties."

XXXVII.

The court erred in finding as a fact so much of finding of fact number thirty-five (35) as reads as follows:

"And it is the plan and expectation of the present officials of the War Department and the present engineering officers in charge of these works to permit 10,000 c. s. f. or more of water to pass through this power canal under average conditions, and to receive payment therefor by way of a license or rental as contemplated by the act of March, 1909, with reference to surplus water."

XXXVIII.

The court erred in finding as a fact finding of fact number thirty-six (36), which reads as follows:

"The plans and specifications approved by the War Department and the engineers, forming part of this general project and now in

process of execution, provide for dams, cross and longitudinal, similar to those now in existence, but further out into the bed of the stream. By this structure it is the plan and expectation of such department and of such officials to develop water power for sale, pursuant to the provisions of this act regarding surplus water."

XXXIX.

The court erred in finding as a fact finding of fact number thirty-seven (37), which reads as follows:

"The existing structures built by or under the Chandler-Dunbar Company are in connection with a tail race excavated upon the
761 below-lying public river bed, whereby there is, at the power house, a fall of 15 feet instead of only the 9-foot fall (effective) which exists on the Chandler-Dunbar property. The existing dam provided for and contemplated setting 9 wheels, each capable of developing under the 15-foot head 500 horsepower, making a total planned and partly executed development of 4,500 horsepower (electrical, equally, 6,500 theoretical). At the time of condemnation four such wheels had been set and were in use. Suitable wheels in the same location and under a nine-foot head would develop 225 horsepower (electrical) each. The outer dike of the existing head race extended to the second span of the bridge and was capable of diverting into the head race, out of the supposed 60,000 c. s. f., substantially 6,500 c. s. f. The capacity of the four installed wheels under the existing conditions of fall and tail race has been about 2,000 c. s. f., and the amount of water actually diverted through the Chandler-Dunbar head race and works has for some time approximated, but has not exceeded, 2,000 c. s. f."

XL.

The court erred in finding as a fact finding of fact number thirty-eight (38), which reads as follows:

"The proposed United States structures in the bed of the stream will deliver 7,500 c. s. f. (at stage 601.5), and will produce 12,700 horsepower under a 15-foot head, or 7,500 horsepower under a 9-foot effective head (both theoretical)."

XLI.

The court erred in finding as a fact finding of fact number forty (40), which reads as follows:

"The amount seized or impounded by the Chandler-Dunbar Water Power Company's existing development is and will be surplus water not needed directly or indirectly for navigation, save by that
762 species of constructive need with reference to which the facts have hereinbefore been found."

XLII.

The court erred in finding as a fact finding of fact number forty-one (41), which reads as follows:

"The amount of water sufficient to develop 6,500 horsepower (4,500 electrical) on the property of the Chandler-Dunbar Company—that is, on a 9-foot effective fall—is the proper figure to be taken in this connection. True, so much water in cubic-second feet has not yet been passed through the headrace, and could not be in its present form. Some enlargement of the head opening would be necessary, but the improvements were planned for this 6,500 horsepower, an investment was made, and a business built up on such plan; the tailrace, which would allow this power to be developed with the greater head and the smaller amount of water, was permitted, and the acquiescence of the Government agents and the public was in a plan which contemplated and called for so much water as might be necessary to develop 6,500 horsepower; and I think it was included in such plan that such development would be wholly upon the Chandler-Dunbar property if the tailrace privileges should not be continued. This, then, justifies and calls for a finding which is, in form, a finding of fact, but which, as I view it, is only a question of drawing the proper legal inference from the various facts found, and, accordingly, I do find that water sufficient to develop 6,500 horsepower (theoretical) on the property of the Chandler-Dunbar Company is surplus water, for which compensation should be assessed in this proceeding."

XLIII.

763 The court erred in finding as a fact finding of fact number forty-two (42), which reads as follows:

"Such 6,500 horsepower has an annual value of $55,000, a present value of $550,000."

XLIV.

The court erred in finding as a fact so much of finding of fact number forty-three (43) as reads as follows:

"The upland along the rapids, comprising the Chandler entry, a part of Portage Street, and part of private land claim No. 3, has an independent value. It is preeminently fitted for a manufacturing site in connection with the water power to be developed. It also has value in connection with the probability that it would be needed for lock and canal or bridge purposes. The value of this parcel is subject to many contingencies, but I fix the same as follows: * * * For a factory site in connection with the proposed development of the entire water power so as to use thereon or in connection therewith 30,000 horsepower or more, an additional value of $80,000, or a total of $100,000. For use as a factory site in connection with the development of 6,500 horsepower, either as single site or for several

smaller factories, to use the surplus of 6,500 horsepower not now used in the city, an additional value of $20,000, or a total of $40,000. The fact that it was desirable for use for lock and canal or bridge purposes gives it an additional value element in each case of $25,000. The total value of this parcel for this proceedings should therefore be taken as $65,000."

XLV.

The court erred in finding as a fact so much of finding of fact number forty-five (45) as reads as follows:

"Claims 95 and 96 front upon deep water, above the head of the rapids. They have been used for wharfage for many years,
764 and the wharf structures and the filling now located theron and extending therefrom have cost approximately $12,000. On the submerged land appurtenant to them (or to the parts sold January 22nd, 1908, by the deed reserving all riparian rights) spoil from the lock work has been and is being dumped. It was a part of the consideration for this quitclaim of 1908 by the Chandler-Dunbar Company that this fill and dump should be made by the United States, and the complete carrying out of this plan in good faith as then contemplated would have given a large frontage and a considerable area along the upper river supported by those two private claims. I fix the value of these two claims and the dump and fill made, or which should have been made, all as one parcel, as follows: * * * By reason of its desirability for lock and canal purposes an additional $10,000. In connection with the land along the rapids, if used as a part of the development of the 6,500 horsepower, an additional value of $5,000, or a total of $25,000. To be used in association with the land along the rapids for the development of the entire 30,000 or more horsepower, a still additional value of $25,000, or a total of $50,000.

"For the reasons stated the owners are entitled to the general purpose or base value plus the canal and lock value element plus the 6,500 horsepower value element, making a total value of $25,000."

XLVI.

The court erred in finding as a fact finding of fact number fifty-nine (59), which reads as follows:

"The plans and specifications referred to in findings 36 and 38 contemplate a cross dam, including the present cross dam of the Edison Sault Electric Company, and extending about 200 feet further out into the stream, substantially at right angles with
765 the flow, and a wing dam extending upstream therefrom about 2,000 feet, and the upper end of which will be in the stream about 1,000 feet from the shore. The contract had been made for the construction of such work, and such construction was progressing at the time of the trial. All the different plans which have been proposed for development, viz, (a) the first improve-

ment by the Chandler-Dunbar Company, (b) that of the Edison Sault Electric Company adopted and executed about 1901, (c) that by the American Sault Paper Company projected in 1902, but not executed, (d) that of the United States now being executed, and (e) the plan presented by the Chandler-Dunbar Company herein as its basis for computing values, are substantially of the same character and show the adoption of substantially the same method."

XLVII.

The court erred in finding as a fact so much of finding of fact number sixty-two (62) as reads as follows:

"(b) The largest volume of freight now anticipated as proper to be provided for is 200,000,000 tons per year. (c) The volume of flow of 4,000 c. s. f. would provide for the passage of 1,000,000,000 tons of freight per annum, according to present methods and for all forest products now passing."

XLVIII.

The court erred in finding as a fact finding of fact number sixty-four (64), which reads as follows:

"The land of the Chandler-Dunbar Company herein taken, upland and submerged, forms the most available site for such controlling works, and the most available site for another international bridge anywhere between Lakes Superior and Huron."

766

XLIX.

The court erred in finding as a fact so much of finding of fact number seventy (70) as reads as follows:

"(b) As a strategic value growing out of the extent to which it may control or block the most available development by upstream owners, $15,000. (c) As an additional value, by reason of its special suitability for lock or canal purposes, $5,000. (d) If it should be held that the riparian owners are entitled to compensation for water power above the 4,000 c. s. f. estimate and above the 6,500 c. s. f. allowance, then the value of such excess water power appurtenant to Island No. 5 is ten per cent of that to be fixed for the similar rights of the Chandler-Dunbar Company."

L.

The court erred in overruling the following motion filed and submitted by the Government, viz:

"Now, comes the United States of America, petitioner, by Fred C. Wetmore, R. T. Strickland, William K. Clute, and Grant Fellows, its attorneys, and move the court now here that the judgment and award herein in favor of the Chandler-Dunbar Water Power Company be limited to the sum of forty-five thousand four hundred

sixty-two ($45,462.00) dollars, eliminating and disallowing from said judgment and award the sum of five hundred fifty thousand ($550,000) dollars for the raw water power; the sum of eighteen thousand six hundred ($18,600.00) dollars (being 93% of the additional value given the upland 'for use as factory site in connection with the development of 6,500 horsepower, either as a single site or for several smaller factories to use the surplus of 6,500 horsepower not now used in the city'); also eliminating twenty-three thousand two hundred fifty ($23,250.00) dollars (being 93% of the sum of twenty-five thousand dollars, which sum was added to the
767 base value from 'the fact that it was desirable for use for lock and canal or bridge purposes'); also eliminating the sum of ten thousand ($10,000.00) dollars from the allowance for private claims 95 and 96 'by reason of its desirability for lock and canal purposes'; also eliminating the sum of five thousand ($5,000) dollars, value given 'in connection with the land along the rapids if used as a part of the development of the 6,500 horsepower,' notwithstanding so much of the finding of the court of fact number nine (9) as reads as follows: 'As to the submerged lands out to the boundary, the matter is not so clear. A large part is clearly not directly necessary, at present, for the needs of navigation; but such part is so connected with, and incidental to, the other directly and presently necessary portion as to be affected by, and brought within, the same pervading necessity, and as to make it proper for Congress to take the whole. * * * The necessity for taking all, so applied to the facts here, is a necessity of peculiar character. It may be called a constructive, as distinguished from an actual, necessity. As to the excess beyond a certain amount of land and water, and taking is secondary and incidental to the taking of the primary body now needed.'"

And notwithstanding the finding of fact number fourteen (14), which reads as follows: "There is a present, established demand for a comparatively small amount of the raw (unimproved) power. The natural increase from the ordinary growth of the community will not more than counterbalance the loss when the Government construction work ceases. Any further demand must be created by the promotion of power-consuming concerns. The plan for promoting or securing a wood pulp mill which would consume all the available power, storing, if necessary, its surplus product during the high water, is feasible, and its reasonably probable of execution.
768 Such probability is sufficiently definite and certain to justify the conclusion that all the power has a definite value, instead of the conclusion that most of it is too speculative for computation; and I adopt the former conclusion as the fact. I fix the annual value of the raw power, per theoretical horsepower, as follows: For the first 3,000 h. p., $10.00 each; for the second 3,000 h. p., $7.50 each; for all beyond 6,000 h. p., $5.00 each. The cost of development, as far made, should be added. These values are on the basis of a perfect and unincumbered right to the water."

And notwithstanding the finding of fact number twenty (20), which reads as follows: "The present use of the water in direct aid of navigation is only for filling and operating locks and for floating a few logs. The best expert judgment, both of the waterways commission and of the witnesses in this case, is that 4,000 c. s. f. is the maximum amount which will ever be needed for these purposes, and, therefore, the amount to be needed for navigation, so far as the same can now be definitely determined, must be fixed at this figure, leaving the balance beyond need for navigation. I think, however, that owing to all the contingencies involved, it is impossible to fix this amount with sufficient certainty to make any definite finding of fact relating thereto, except as in this and in other paragraphs stated."

And notwithstanding so much of finding of fact number twenty-nine as reads as follows: "The railroad affords access to the upland for heavy traffic, and the maintenance of a side track into this property was one of the things expected and arranged for when the quit claim deed of January, 1908, was given. Claims 95 and 96 give full access to deep water navigation on Lake Superior. Transmission wires for electricity could cross the canal, as is now done by conduit under the same, without any prejudice or
769 injury to the public use of the canal."

And notwithstanding the finding of fact number thirty-four (34), which reads as follows: "For about twenty years the Chandler-Dunbar Company, or its predecessors or some one claiming under it, has been developing power at this part of the rapids. This was accomplished by a short transverse dam near the lower boundary of its land, extending out a short distance into the stream and then extending up along the bed of the stream (substantially) parallel to the bank up to the head of the rapids. This dam or wall, toward its upper end, diverged out into the stream the better to divert water into the head race and into the forebay formed by its lower part. Earlier structures of this character were replaced about 1901, by those more extensive ones which existed when this condemnation was made. While considerable in extent and cost, they are inconsiderable as compared with the structures now proposed to utilize the whole power, and they were, comparatively speaking, along the bank rather than across the stream. Development of power thereby would be subject to some of the special objections and difficulties which have been noted, but to many and perhaps the majority of such objections, it would not be subject, or, if subject thereto, would be so in a degree very much less than the proposed plan for entire development. From year to year, these developers have added to their investment relating to and depending thereon, until such investment, at the time of this taking, amounted to approximately $500,000. The public lighting of the city of Sault Ste. Marie and the maintenance of various industries there were dependent on the power so developed. The United States itself, or contractors working on its public works, has for some years, taken

electric power from this source and paid therefor to these private parties."

770 And notwithstanding so much of finding of fact number thirty-five (35), as reads as follows: "And it is the plan and expectation of the present officials of the War Department and the present engineering officials in charge of these works to permit 10,000 c. s. f. or more, of water to pass through this power canal under average conditions and to receive payment therefor by way of a license or rental, as contemplated by the act of March, 1909, with reference to surplus water."

And notwithstanding the finding of fact number thirty-six (36), which reads as follows: "The plans and specifications approved by the War Department and the engineers, forming part of this general project and now in process of execution, provide for dams, cross and longitudinal, similar to those now in existence, but further out into the bed of the stream. By this structure it is the plan and expectation of such department and of such officials to develop water power for sale, pursuant to the provisions of this act regarding surplus water."

And notwithstanding the finding of fact number thirty-seven (37), which reads as follows: "The existing structures built by or under the Chandler-Dunbar Company are in connection with a tail race excavated upon the below-lying public river bed, whereby there is at the power house a fall of 15 feet instead of only the 9-foot fall (effective) which exists on the Chandler-Dunbar property. The existing dam provided for and contemplated setting 9 wheels, each capable of developing under the 15-foot head 500 horsepower, making a total planned and partly executed development of 4,500 horsepower (electrical, equaling 6,500 theoretical). At the time of condemnation four such wheels had been set and were in use. Suitable wheels in the same location and under a 9-foot head would

771 develop 225 horsepower (electrical) each. The outer dike of the existing headrace extended to the second span of the bridge and was capable of diverting into the headrace, out of the supposed 60,000 c. s. f., substantially 6,500 c. s. f. The capacity of the four installed wheels under the existing conditions of fall and tail race has been about 2,000 c. s. f., and the amount of water actually diverted through the Chandler-Dunbar headrace and works has for some time approximated, but has not exceeded, 2,000 c. s. f."

And notwithstanding the finding of fact number thirty-eight (38), which reads as follows: "The proposed United States structures in the bed of the stream will deliver 7,500 c. s. f. (at stage 601.5), and will produce 12,700 horsepower under a 15-foot head, or 6,500 horsepower under a 9-foot effective head (both theoretical)."

And notwithstanding the finding of fact number forty (40), which reads as follows: "The amount seized or impounded by Chandler-Dunbar Company's existing development is and will be surplus water not needed, directly or indirectly, for navigation, save by that species

of constructive need with reference to which the facts have hereinbefore been found."

And notwithstanding the finding of fact number forty-one (41), which reads as follows: "The amount of water sufficient to develop 6,500 horsepower (4,500 electrical) on the property of the Chandler-Dunbar Company—that is, on a 9-foot effective fall—is the proper figure to be taken in this connection. True, so much water in cubic second-feet has not yet been passed through the headrace, and could not be in its present form. Some enlargement of the head opening would be necessary, but the improvements were planned for this 6,500 horsepower, an investment was made, and a business
772 built up on such plan; the tailrace which would allow this power to be developed with the greater head and the smalier amount of water was permitted, and the acquiescence of the Government agents and the public was in a plan which contemplated and called for so much water as might be necessary to develop 6,500 horsepower; and I think it was included in such plan that such development would be wholly upon the Chandler-Dunbar property if the tailrace privilege should not be continued. This, then, justifies and calls for a finding which is, in form, a finding of fact, but which, as I view it, is only a question of drawing the proper legal inference from the various facts found, and, accordingly, I do find that water sufficient to develop 6,500 horsepower (theoretical) on the property of the Chandler-Dunbar Company is surplus water, for which compensation should be assessed in this proceeding."

And notwithstanding the finding of fact number forty-two (42), which reads as follows: "Such 6,500 horsepower has an annual value of $55,000, a present value of $550,000."

And notwithstanding the finding of fact number forty-three (43), which reads as follows: "The upland along the rapids, comprising the Chandler-Dunbar entry, a part of Portage Street, and part of private land claim No. 3, has an independent value. It is preeminently fitted for a manufacturing site in connection with the water power to be developed. It also has value in connection with the probability that it would be needed for lock and canal or bridge purposes. The value of this parcel is subject to many contingencies, but I fix the same as follows: * * * For a factory site in connection with the proposed development of the entire water,
773 so as to use thereon or in connection therewith 30,000 horsepower or more, an additional value of $80,000, or a total of $100,000. For use as a factory site in connection with the development of 6,500 horsepower, either as single site or for several smaller factories to use the surplus of 6,500 horsepower not now used in the city, an additional value of $20,000, or a total of $40,000. The fact that it was desirable for use for lock and canal or bridge purposes gives an additional value element in each case of $25,000. The total value of this parcel for this proceedings should therefore be taken as $65,000."

And notwithstanding so much of finding of fact number forty-five (45) as reads as follows: "Claims 95 and 96 front upon deep water, above the head of the rapids. They have been used for wharfage for many years, and the wharf structures and the filling now located thereon and extending therefrom have cost approximately $12,000. On the submerged land appurtenant to them (or to the parts sold January 22nd, 1908, by the deed reserving all riparian rights) spoil from the lock work has been and is being dumped. It was part of the consideration for this quitclaim of 1908 by the Chandler-Dunbar Company that this fill and dump should be made by the United States, and the complete carrying out of this plan in good faith as then contemplated would have given a large frontage and a considerable area along the upper river supported by those two private claims. I fix the value of these two claims and the dump and fill, made, or which should have been made, all as one parcel, as follows: * * * By reason of its desirability for lock and canal purposes, an additional $10,000. In connection with the land along the rapids, if used as a part of the development of the 6,500 horsepower, an additional value of $5,000, or a total of $25,000. To be used
774 in association with the land along the rapids for the development of the entire 30,000 or more horsepower, a still additional value of $25,000, or a total of $50,000.

"For the reasons stated the owners are entitled to the general purpose or base value plus the canal and lock value element, *puls* the 6,500 horsepower value element, making a total value of $25,000."

And notwithstanding the finding of fact number fifty-nine (59), which reads as follows: "The plans and specifications referred to in findings 36 and 38 contemplate a cross dam, including the present cross dam of the Edison Sault Electric Company, and extending about 200 feet further into the stream, substantially at right angles with the flow, and a wing dam extending upstream therefrom about 2,000 feet, and the upper end of which will be in the stream about 1,000 feet from the shore. The contract had been made for the construction of such work, and such construction was progressing at the time of the trial. All the different plans which have been proposed for development, viz: (a) the first improvement by the Chandler-Dunbar Company, (b) that of the Edison Sault Electric Company adopted and executed about 1901, (c) that of the American Sault Paper Company projected in 1902, but not executed, (d) that of the United States now being executed, and (e) the plan presented by the Chandler-Dunbar Company herein as its basis for computing values—are substantially of the same character and show the adoption of substantially the same method."

And notwithstanding so much of finding of fact number sixty (60), which reads as follows: "The plan proposed by the Chandler-Dunbar Company for development, as the basis of its claim of value in this case, contemplated and provided for the passage of ice through the development works. Such provision was sufficient for ordinary conditions."

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775 And notwithstanding so much of finding of fact number sixty-two (62) as reads as follows: "(b) The largest volume of freight now anticipated as proper to be provided for is 200,000,000 tons per year; (c) the volume of flow of 4,000 c. s. f. would provide for the passage of 1,000,000,000 tons of freight per annum, according to present methods, and for all forest products now passing."

And notwithstanding the finding of fact number sixty-four (64) which reads as follows: "The land of the Chandler-Dunbar Company herein taken, upland and submerged, forms the most available site for such controlling works and the most available site for another international bridge anywhere between Lakes Superior and Huron."

And notwithstanding so much of finding of fact number seventy (70) as reads as follows: "(b) As a strategic value growing out of the extent to which it may control or block the most available development by upstream owners, $15,000. (c) As an additional value by reason of its special suitability for lock and canal purposes, $5,000. (d) If it should be held that the riparian owners aree entitled to compensation for water power above the 4,000 c. s. f. estimate and above the 6,500 c. s. f. allowance, then the value of such excess water power appurtenant to Island No. 5 is ten per cent of that to be fixed for the similar rights of the Chandler-Dunbar Company.

"For the reason, first, that under Article I, section 8, of the Constitution of the United States, which provides that Congress shall have power to regulate commerce with foreign nations and among the several States and with the Indian tribes, the

776 riparian rights of the Chandler-Dunbar Company in the subaqueous land and the usufruct of the water flowing over such land are subject to the paramount right of the United States for the purpose of commerce, which includes navigation without condemnation or compensation, such submerged lands and water being public and not private property.

"Second. Because the subaqueous land and the usufruct of the water are not private property of the Chandler-Dunbar Water Power Company as against the United States of America, but are the public property of the Nation and as such are under the dominion and control of Congress and may be used under the direction of Congress for the uses of commerce and navigation without compensation to the riparian owner.

"Third. Because the amount of water and subaqueous land needed for the purpose of navigation is a legislative, not a judicial question, Congress having determined that all of such subaqueous lands and water are needed for the purpose of navigation the courts are bound by such determination and cannot inquire into the correctness of such conclusion.

"Fourth. Because it is not a question of fact for the court to determine how much water and subaqueous lands are needed for

navigation purposes, and a finding of fact on such question by the court does not supersede the finding of such fact by Congress.

"Fifth. Because the declaration of Congress, found in section 11 of the river and harbor bill (being act of Congress of March 3rd, 1909, Revised Statutes, pages 820–1–2), as follows:

"'That the ownership in fee simple absolute by the United States of all lands and property of every kind and description north of the present St. Marys Falls Ship Canal through its entire length and lying between said ship canal and the international boundary line at Sault Ste. Marie, in the State of Michigan, is
777 necessary for the purpose of navigation of said waters and the waters connected therewith' is conclusive, final, and binding on this court.

"Sixth. Because no use can be made of said water and subaqueous land by the riparian owner without the consent and license of the United States of America, which consent and license has by the act of Congress been withdrawn, and there is no presumption that after such withdrawal it would be renewed.

"Seventh. Because the value of said land for lock purposes cannot be added to the value of said premises. The damages to be paid should be determined by the detriment occasioned to the owner for the property taken and the amount thereof should not be increased by the fact that the property taken is particularly well adapted to the purposes of the expropriator."

LI.

The court erred in not granting and sustaining said motion.

LII.

The court erred in overruling the following motion filed and submitted by the Government, viz:

"Now comes the United States of America, petitioner, by Fred C. Wetmore, R. T. Strickland, William K. Clute, and Grant Fellows, its attorneys, and move the court now here that the judgment and award herein in favor of the Chandler-Dunbar Water Power Company be limited to the sum of forty-five thousand four hundred sixty-two ($45,462.00) dollars, eliminating and disallowing from said judgment and award the sum of five hundred fifty thousand ($550,000.00) dollars for the raw water power; the sum of eighteen thousand six hundred ($18,600) dollars (being 93% of the additional value given the upland 'for use as factory site in connection
778 with the development of 6,500 horsepower, either as a single site or for several small factories to use the surplus of 6,500 horsepower not now used in the city'); also eliminating the sum of five thousand ($5,000.00) dollars, allowance for private claims 95 and 96, value given, 'in connection with the land along the rapids

if used as a part of the development of 6,500 horsepower,' notwithstanding such part of finding of fact number fourteen (14) as reads as follows: 'I fix the annual value of the raw power per theoretical horsepower as follows: For the first 3,000 h. p., $10.00 each; for the second 3,000 h. p., $7.50 each; for all beyond 6,000 h. p., $5.00 each.'"

Notwithstanding so much of finding of fact number twenty-nine (29) as reads as follows: "Transmission wires for electricity could cross the canal, as is now done, by conduit under the same without any prejudice or injury to the public use of the canal."

Notwithstanding such part of finding of fact number forty-one (41) as reads as follows: "This, then, justifies and calls for a finding which is in form a finding of fact, but which, as I view it, is only a question of drawing the proper legal inference from the various facts found, and, accordingly, I do find that water sufficient to develop 6,500 h. p. (theoretical) on the property of the Chandler-Dunbar Company is surplus water for which compensation should be assessed in this proceeding."

And notwithstanding the finding of fact number forty-two (42), which reads as follows: "Such 6,500 h. p. has an annual value of $55,000.00, a present value of $550,000.00."

And notwithstanding the finding of fact number forty-three (43), which reads as follows: "The upland along the
779 rapids, comprising the Chandler-Dunbar entry, a part of Portage Street, and part of private land claim No. 3 has an independent value. It is preeminently fitted for a manufacturing site in connection with the water power to be developed. It also has value in connection with the probability that it would be needed for lock and canal or bridge purposes. The value of this parcel is subject to many contingencies, but I fix the same as follows: * * * For a factory site in connection with the proposed development of the entire water power so as to use thereon or in connection therewith 30,000 horsepower or more, an additional value of $80,000, or a total of $100,000. For use as factory site in connection with the development of 6,500 horsepower, either as a single site or for several smaller factories to use the surplus of 6,500 horsepower not now used in the city, an additional value of $20,000, or a total of $40,000. The fact that it was desirable for use for lock and canal or bridge purposes gives it an additional value element in each case of $25,000. The total value of this parcel for this proceeding should, therefore, be taken as $65,000."

For the reason that the said lands are surrounded on three sides by Government lands and on the other side by the international boundary and the said Chandler-Dunbar Water Power Company have no way of necessity across Government lands and therefore no method of delivering any product manufactured on said lands to market.

LIII.

The court erred in not granting and sustaining said motion.

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LIV.

The court erred in refusing to conclude and find as matter of law as requested by said petitioner in its third request, viz:

"That the dominion of the United States over the navigable waters for the purpose of commerce is the same as over the public domain."

LV.

The court erred in refusing to conclude and find as matter of law as requested by said petitioner in its fifth request, viz:

"That the navigable waters of the United States, with their beds, for the purpose of commerce and navigation being the public property of the Nation when any portion of this property is required by the United States for its uses in aid of navigation there is no condemnation necessary. It is only necessary for Congress to order the taking of the part needed for the specified use." And to the modification thereof.

LVI.

The court erred in refusing to conclude and find as matter of law as requested by said petitioner in its sixth request, viz:

"That the necessity or expediency of appropriating a part or all of the waters of St. Marys River for public use cannot be the subject of judicial cognizance."

781

LVII.

The court erred in refusing to conclude and find as matter of law as requested by said petitioner in its seventh request, viz:

"That the act of March 3rd, 1909, did not mention specifically that compensation should be paid to the riparian owner for the taking of the waters of St. Marys River, and did not contemplate such a payment, for in section eleven it provided 'any moneys payable by the Government under the provisions of this section shall be payable out of any money heretofore authorized or appropriated for the purpose of improving St. Marys River at the Falls, Michigan,' and the money authorized and appropriated before (heretofore) the passage of said act of March 3rd, 1909, amounted to only 'one hundred thousand dollars' (act of June 30th, 1906, 34 Stat. L., 739) and since March 3 1909, 'two hundred and twenty-five thousand dollars' (act of March 4, 1909, 35 Stat. L., 998), these sums together amounting to $325,000, which is $225,000.00 less than the proposed award for water power, $550,000.00, leaving nothing for the value of the physical properties and uplands."

LVIII.

The court erred in refusing to conclude and find as matter of law as requested by said petitioner in its eighth request, viz:

"That there is now no appropriation by Congress out of which the sum of $550,000 may be paid for 'water power' and none 'heretofore made for that purpose.'"

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LIX.

The court erred in refusing to conclude and find as matter of law as requested by said petitioner in its tenth request, viz:

"That while the submerged lands remain a part of the bed of the river it is not private property in the sense of the fifth amendment to the Federal Constitution."

LX.

The court erred in refusing to conclude and find as matter of law as requested by said petitioner in its eleventh request, viz:

"That compensation cannot be claimed for damages done to riparian owners where property is taken or their rights restricted in aid of commerce and navigation."

LXI.

The court erred in refusing to conclude and find as matter of law as requested by said petitioner in its twelfth request, viz:

"That under the power conferred upon Congress by the Constitution to regulate commerce, the United States possesses, provided Congress sees fit to exercise it, the right to control all structures and works which interfere in any manner with the navigable capacity of navigable waters of the United States which, either by themselves or in connection with other waters, form channels for interstate commerce" and in holding that the same is not controlling on the question of compensation.

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LXII.

The court erred in refusing to conclude and find as matter of law as requested by said petitioner in its thirteenth request, viz:

"That the erection of any obstruction to the navigable capacity of any of the waters of the United States, not affirmatively authorized by Congress, is unlawful, and it is unlawful to construct or commence the construction of any bridge, dam, dike, or causeway over or in any port, roadstead, haven, harbor, canal navigable river, or other navigable water of the United States until the consent of Congess to the building of such structure shall have been submitted to and approved by the Chief of Engineers and by the Secretary of War, a violation of which shall be deemed a misdemeanor punishable by a fine or imprisonment. (Sections 9, 10 and 12, act of March 3rd, 1899, 30 Stat. L., p. 1151.)"

LXIII.

The court erred in refusing to conclude and find as matter of law as requested by said petitioner in its fourteenth request, viz:

"That in view of the provisions of section nine, ten and twelve of said act of March 3rd, 1899, structures of any character cannot

lawfully be placed in or over any of the navigable waters of the United States without permits issued by consent of Congress upon the recommendation of the Chief of Engineers when approved by the Secretary of War, and in holding that said request is not controlling on the question of compensation."

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LXIV.

The court erred in refusing to conclude and find as matter of law as requested by said petitioner in its fifteenth request, viz:

"That to preserve the navigable waters for purposes of navigation such permits must contain terms and conditions and be revocable at the pleasure of the Government according to the needs of navigation, otherwise the control of said waters would be in part surrendered to private parties" and in modifying the same by adding "but the needs of navigation must not be merely imaginary." (See Opinion.)

LXV.

The court erred in refusing to conclude and find as matter of law as requested by said petitioner in its eighteenth request, viz:

"That a court has not the power to decide or assume permits will be issued to persons to erect structures in navigable waters under the control of Congress, in view of the provisions of the act of March 3, 1899" and in holding that said request is not controlling on the question of compensation.

LXVI.

The court erred in refusing to conclude and find as matter of law as request by said petitioner in its twentieth request, viz:

"There is no legal interruption to the actual navigable capacity and character of said river adjacent to the uplands described in the petition, of which said courts will also take judicial notice."

785

LXVII.

The court erred in refusing to conclude and find as a matter of law, as requested by said petitioner in its twenty-first request, viz:

"The people of the United States own the right under treaties and the law of nations to navigate said waters from shore to shore, and more particularly under the laws of the United States from the south shore to the international boundary line throughout the full extent of the river, and to use and improve it in aid of such right of navigation, to which right of public ownership and use, private ownership and use of the submerged land therein and waters flowing over the same is subservient, and that such navigation right, with all its incidents, is a part of the public domain of the United States and a paramount right in said river."

LXVIII.

The court erred in refusing to conclude and find as a matter of law, as requested by the petitioner in its twenty-third request, viz:

"The Federal courts possess no power to parcel out the waters of said navigable river between the public and the private owner of the submerged lands, which are appurtenant to the uplands described in the petition, and declare by a judgment or decree that any portion of said navigable waters is not needed for navigation and is surplus water over and above navigation needs, is the absolute private property of the riparian owner, and that, if used by the public in its exercise of the right to regulate navigation on said river, either now or in the future, must be either condemned or bought and paid for from the owner of the fee to such subaqueous lands."

786

LXIX.

The court erred in refusing to conclude and find as matter of law, as requested by said petitioner in its twenty-fourth request, viz:

"The determination of Congress, by the provisions of section 11, act of March 3rd, 1909, 35 U. S. Stats., p. 820–1–2, of the necessity for the vacation of the river bed of St. Marys River at the Falls by private persons or corporations (who have heretofore occupied the same and developed, to a certain extent, water power in said river), because of the public necessity of the occupation thereof, for the purpose of regulating navigation and erecting improvements therein, and requiring said power-development companies to vacate the bed of the stream and the taking of the possession thereof and erecting upon the submerged lands of public works in aid of navigation is not a taking of private property for public use within the meaning of the fifth amendment to the Federal Constitution and requires no condemnation or compensation before such right upon the submerged lands may be exercised.

LXX.

The court erred in refusing to conclude and find as matter of law, as requested by said petitioner in its twenty-fifth request, viz:

"If, in the installation in said river bed of public works of the Government, primarily intended as improvements to navigation or in the methods of navigation carried on by the Government, there may be from time to time found a quantity of water which can be availed of for developing power, it is competent for the Government to conserve and use said power from the economic policy of preventing waste of natural resources; it is merely incident to reg-

787 ulation of navigation and is not a taking of private property without compensation for the Government to use, sell, or lease such possible surplus power so developed by its own works in aid of navigation and apply the proceeds to the Public Treasury," and in

modifying the same by adding, "But the intention that the public works shall be an improvement to navigation must be real and not a pretense, if in party pretense then pro tanto, the result specified in this request follow."

LXXI.

The court erred in refusing to conclude and find as matter of law as requested by said petitioner in its twenty-sixth request, viz:

"None of the permits which are in evidence that were issued by the Secretary of War to the Chandler-Dunbar Company or the Edison Sault Company, or their predecessors, relative to their company and use of the river for the purpose of developing power therein created any vested property right, as against the organized public seeking to improve navigation, to continue such occupancy of the river bed and to continue to use and develop such power after the permits were revoked, as by the terms of said permits they were all revocable and have been revoked," and in modifying the same by adding, "But such permits and their history may have evidential force on the subject of what is surplus water appropriated for power." (See opinion.)

LXXII.

The court erred in refusing to conclude and find as matter of law as requested by said petitioner in its twenty-seventh request, viz:

"Failure or refusal of said companies or persons so occupy-
786 ing and using said river bed and the waters therein to vacate the river bed after revocation of such permits, and a continued occupancy and possession by them of the same, with their structures and machinery for their private use in developing power after such revocations were to take effect, constituted them per se public nuisances in said river."

LXXIII.

The court erred in refusing to conclude and find as matter of law as requested by said petitioner in its twenty-eighth request, viz:

"The governmental necessity to have the lands described in the petition for the purpose of erecting thereon canals and locks and other public works in aid of navigation is not an element of value to be added to making up the owner's award and not an increment of value in said property to which the private owner is entitled. Nor can the favorable location of the property for the installation of canals and locks thereon, or a so-called strategic value claimed therein, be considered as a factor for the purpose of enhancing the value of the property to the private owner in these proceedings, since such value would be made up of the necessity of the Government to have the property for a public use. Public works herein described are constructed in the general interests of the people in

aid of interstate marine commerce on the Great Lakes and not for the enhancement of the value of private property upon which they are or may be erected."

LXXIV.

The court erred in refusing to conclude and find as matter of law as requested by said petitioner in its thirtieth request, viz:

"If any value above one dollar, the recited consideration
789 in said deed, attaches to said lands and the conveyance thereof to the United States, for which said company is entitled to compensation from the United States, its remedy is not in this proceeding, but is in the Court of Claims," and in modifying the same by adding, "But the facts referred to in request 29 and 30 have a bearing on the amount of compensation to be awarded for the further lands now taken."

LXXV.

The court erred in refusing to conclude and find as matter of law, as requested by said petitioner in its thirty-first request, viz:

"The declaration of Congress found in section 11 of the river and harbor bill (being act of Congress of March 3rd, 1909, Revised Statutes, pages 820–1–2), as follows: 'That the ownership in fee simple absolute by the United States of all lands and property of every kind and description north of the present St. Marys Falls Ship Canal throughout its entire length, and lying between said ship canal and the international boundary line at Sault Ste. Marie, in the State of Michigan, is necessary for the purpose of navigation of said waters and the waters connected therewith,' is conclusive, final, and binding on this court, and in modifying the same by adding: 'But the exact character and effect of the necessity declared are questions remaining for consideration.'"

LXXVI.

The court erred in refusing to conclude and find as matter of law, as requested by said petitioner in its thirty-second request, viz:

"The subaqueous land and the usufruct of the water adjoining the premises of the Chandler-Dunbar Water Power Company are the public property of the Nation, and their use is under the control of Congress."

790 LXXVII.

The court erred in refusing to conclude and find as matter of law, as requested by said petitioner in its thirty-third request, viz:

"The Chandler-Dunbar Water Power Company have no private property in the subaqueous land, or the usufruct of the water adjacent to its uplands, as against the Government, which requires compensation by the Government."

LXXVIII.

The court erred in refusing to conclude and find as matter of law, as requested by said petitioner in its thirty-sixth request, viz:

"The value of any of the premises for lock and canal purposes cannot be taken into consideration in making the award."

LXXIX.

The court erred in refusing to conclude and find as matter of law, as requested by said petitioner in its thirty-seventh request, viz:

"The strategic value of any of the property taken cannot be considered in making the award."

LXXX.

The court erred in refusing to conclude and find as matter of law, as requested by said petitioner in its thirty-eighth request, viz:

"Vested rights cannot be acquired under revocable permits from the Government, and the Chandler-Dunbar Water Power Company acquired no vested rights in the St. Marys River by reason of the issuance to them of the revocable permits," and in modifying the same by adding: "I give only evidential force to the permits and their history."

791

LXXXI.

The court erred in refusing to conclude and find as matter of law as requested by said petitioner in its thirty-ninth request, viz:

"Any construction in the St. Marys River without the permission of the Government is a nuisance per se. No riparian owner has the right to put any dam or other obstruction in the stream." And to the further statement of the court as follows: "I conceive there might be obstructions which would not, by any possibility, injuriously effect any public rights."

LXXXII.

The court erred in refusing to conclude and find as matter of law as requested by said petitioner in its fortieth request, viz:

"The Chandler-Dunbar Water Power Company is estopped by reason of its acceptance of the revocable permits from claiming against the Government any private property in the subaqueous lands of the usufruct of the waters of St. Marys River."

LXXXIII.

The court erred in refusing to conclude and find as matter of law as required by said petitioner in its forty-second request, viz:

"Riparian owners along navigable rivers have no private property in such streams against the Government, cannot dam or obstruct them without governmental license, and therefore are not entitled to

compensation from the Government when appropriated by the Government for public purposes."

792 LXXXIV.

The court erred in refusing to conclude and find as matter of law as requested by said petitioner in its forty-third request, viz:

"That the damages to be paid should be determined by the detriment occasioned to the owner of the property taken, and the amount thereof should be neither increased nor diminished by the fact that the property taken is peculiarly well adapted to the purposes of the expropriator," and in modifying the same by adding: "I do not regard this as inconsistent with the conclusion that suitability for lock and canal purposes is one element of value to be considered, because the detriment to the owner consists in the taking of every element of value which the property had."

LXXXV.

The court erred in refusing to conclude and find as matter of law as requested by said petitioner in its forty-fourth request, viz:

"I find as a matter of law that under Act. I, section 8 of the Constitution of the United States which provides that Congress shall have the power 'to regulate commerce with foreign nations and among the several States, and with the Indian tribes' the riparian rights of the Chandler-Dunbar Company in the subaqueous land and the usufruct of the waters flowing over such land are subject to the paramount right of the United States for the purpose of commerce, which includes navigation without condemnation or compensation, such submerged lands and waters being public and not private property."

793 LXXVI.

The court erred in granting and approving the seventh request for conclusion of law of the Chandler-Dunbar Water Power Company, viz:

"In considering the just compensation to be awarded the Chandler-Dunbar Water Power Company on account of the taking of title to this water power, it must be supposed that the United States, while fostering to the utmost the interests of, and improvement of, navigation, would not cause any interference with, or diminution of, the value of such riparian water power beyond such interference or *don*inution as would be necessary for such fostering of, and improvement of, navigation."

LXXXVII.

The court erred in granting and approving the tenth request for conclusion of law of the Chandler-Dunbar Water Power Company, viz:

"The compensation to which the Chandler-Dunbar Water Power Company is entitled for its property taken cannot be substantially

less than the property—proprietary—value acquired by the United States by the taking."

LXXXVIII.

The court erred in granting and approving the thirteenth request for conclusion of law of the Chandler-Dunbar Water Power Company, viz:

"It is not competent for the United States to take, without compensation, the property of the American riparian at the Sault to satisfy Canada for a taking of common water at some other point."

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LXXXIX.

The court erred in granting and approving the eighteenth request for conclusion of law of the Chandler-Dunbar Water Power Company, viz:

"Presumably the Canadian courts would enforce the rights of American riparians against wrongdoers on the Canadian side of the international boundary. Also, presumably, the Federal courts would enforce the rights of Canadian riparians against wrongdoers on the American side."

XC.

The court erred in granting and approving the nineteenth request for conclusion of law of the Chandler-Dunbar Water Power Company, viz:

"The act of Congress of September 26, 1850, providing for the settlement of claims for land at Sault Ste. Marie did not authorize any acknowledgment to be made of map of the village therein provided for, but required the map to be transmitted to the Commissioner of the General Land Office.

"Under the statute of the State of Michigan in force at the time of the making of said map, called the Whelpley map, a map without an acknowledgment was of no force or validity for purposes of a statutory dedication."

XCI.

The court erred in granting and approving the twentieth request for conclusion of law of the Chandler-Dunbar Water Power Company, viz:

"Subject to the power of Congress to regulate commerce, the Chandler-Dunbar Water Power Company as a riparian proprietor was entitled to the continued natural flow of the water of the River St. Mary past its shore without diminution or alteration."

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XCII.

The court erred in granting and approving the twenty-first request for conclusion of law of the Chandler-Dunbar Water Power Company, viz:

"The right to build a wing dam in the bed of the river St. Mary is a common-law right, which has not been modified or changed in

Michigan by the constitution or any statute, and is in force in the State of Michigan, excepting as the same is subject to the power of Congress to regulate."

XCIII.

The court erred in granting and approving the twenty-second request for conclusion of law of the Chandler-Dunbar Water Power Company, viz:

"The Chandler-Dunbar Water Power Company was not legally required to obtain a permit or consent of the board of supervisors of Chippewa County to put improvements or structures in the river St. Mary."

XCIV.

The court erred in granting and approving the second request of the respondents, St. Marys Falls Power Company and the Michigan Lake Superior Power Company, for conclusions and findings of law, viz:

"It is not a proper rule of law to segregate Island No. 5 as a distinct parcel and determine the water power appurtenant to it as valueless."

XCV.

The court erred in granting and approving the third request of the respondents, St. Marys Falls Power Company and the Michigan Lake Superior Power Company, for conclusions and findings of law, viz:

796 "Island No. 5, by reason of its location, has a natural value for lock and canal purposes, and has a special desirability for either or both of such purposes."

XCVI.

The court erred in granting and approving the fourth request of the respondents, St. Marys Falls Power Company and the Michigan Lake Superior Power Company, for conclusions and findings of law, viz:

"Island No. 5 has a strategic value of a substantial character, one capable of pecuniary measurement, and on which account compensation should and must be paid for such element of value."

XCVII.

The court erred in concluding and finding as matter of law as concluded and found in conclusion of law number one, viz:

"In a general, preliminary way the subject and modifications hereafter specified, the Chandler-Dunbar Company was the lawful owner of the flow and fall of the water; that is to say, the water-power rights over against its riparian lands out to the international boundary line."

XCVIII.

The court erred in concluding and finding as matter of law as concluded and found in conclusion of law number five, viz:

"The act of Congress involved does not raise the necessary implications of law that no compensation should be paid for any of the water-power rights taken."

797 XCIX.

The court erred in concluding and finding as matter of law as concluded and found in conclusion of law number six, viz:

"The existing necessity in this case for taking the uplands and some of the submerged lands and flow of the water for purposes of navigation is actual, present, and direct; as to the remainder of the submerged lands and flow of the water, such necessity is constructive, secondary, and incidental."

C.

The court erred in concluding and finding as matter of law as concluded and found in conclusion of law number seven, viz:

"For the taking of the submerged land and flow of the water directly necessary under the previous paragraph, there can be no compensation; for that as to which only the incidental necessity exists, compensation must be paid."

CI.

The court erred in concluding and finding as matter of law as concluded and found in conclusion of law number eight, viz:

"Where private rights (as water-power rights) are being taken for public use under the necessity of the constructive or incidental class, the burden is upon the private owner, seeking compensation, to show that the necessity is only theoretical; in other words, and as applied to this case, the burden is on the private owner to show that the surplus water not now needed for navigation will not ever be so needed."

798 CII.

The court erred in concluding and finding as matter of law as concluded and found in conclusion of law number nine, viz:

"In such case the burden of proof must rest on the private owner of the water power to show, first, that after the satisfaction of the public right, there will remain a portion of the whole power now being taken; and, second, that this remainder portion is substantial and not speculative, but capable of reasonably certain determination from the proof."

CIII.

The court erred in concluding and finding as matter of law as concluded and found in conclusion of law number twelve, viz:

"The effect of the act and of the instrument of taking is that all private water rights which there may be, appurtenant to the land described, shall be taken, and that compensatory value shall be paid for any such rights, if any, which are not merged in the dominant public right."

CIV.

The court erred in concluding and finding as matter of law as concluded and found in conclusion of law number thirteen, viz:

"For the purpose of determining the sale value of water-power property of this kind, the annual rental value should be capitalized at ten per cent."

CV.

The court erred in concluding and finding as matter of law as concluded and found in conclusion of law number fourteen, viz:

799 "In each case of this character, the extent of the supersession and absorption of the private right by the dominant public right is a question of fact; and the extent of the servient estate for which compensation is to be assessed in this case must be determined as a specific question in view of the particular facts of this case."

CVI.

The court erred in concluding and finding as matter of law as concluded and found in conclusion of law number seventeen, viz:

"In determining the compensation to be awarded for private water rights if taken for public use, it is not to be presumed, nor is it a contingency to be considered, that the public may arbitrarily refuse to permit the erection of structures necessary to develop the power, and which structures do not in fact in any manner injuriously effect the public right of navigation."

CVII.

The court erred in concluding and finding as matter of law as concluded and found in conclusion of law number nineteen, viz:

"It is not to be presumed, nor is it a contingency to be considered in assessing compensation, that the Government would not permit upon the submerged land structures necessary to develop the water power, and which did not, in fact, effect the public right of navigation excepting upon the payment of a burdensome license fee in the nature of a rental."

CVIII.

The court erred in concluding and finding as matter of law as concluded and found in conclusion of law number twenty-one, viz:

800 "No understanding between the Chandler-Dunbar Company and the Secretary of War or his subordinates, in connection with the Chandler-Dunbar deed of January, 1908, can operate to destroy public rights or to create vested interests as against the public; but as a basis of fixing the value of property affected by such understanding and now taken, it should be assumed that such understanding will be carried out in good faith by the United States."

CIX.

The court erred in concluding and finding as matter of law as concluded and found in conclusion of law number twenty-six, viz:

"In this case the prima facie or normal right of the riparians to the benefit of the inchoate power on their submerged land (above the maximum 4,000 c. s. f. estimate for the locks, etc.) is so unusually and peculiarly hampered, uncertain, and vague as to put upon the riparians the burden of showing by clear and convincing evidence that the water power for which they ask compensation is beyond the objection that the difficulties of the situation make it too speculative for computation."

CX.

The court erred in concluding and finding as matter of law as concluded and found in conclusion of law number twenty-seven, viz:

"The force of the private developments which have been permitted by the United States is evidential."

801

CXI.

The court erred in concluding and finding as matter of law, as concluded and found in conclusion of law number twenty-eight, viz:

"In a situation where it is highly probable that there is surplus water which will never be directly needed for navigation, but where the riparian proprietor is unable to show with sufficient clearness how much such surplus is, evidence that the United States, speaking by the acts of those representing it, has acquiesced in a claim or joined *is* a declaration that certain water is subject to appropriation for power, is of strong evidential force to establish the fact so declared, and in a case otherwise doubtful, may be sufficient to meet the burden resting on the riparian."

CXII.

The court erred in concluding and finding as matter of law, as concluded and found in conclusion of law number thirty, viz:

"The history of the Chandler-Dunbar Water Power Company, Edison Sault Electric development tends to establish that the water

appropriated thereby is and will be surplus water beyond that need for navigation which will justify taking without compensation."

CXIII.

The court erred in concluding and finding as matter of law, as concluded and found in conclusion of law number thirty-two, viz:

"For the purpose just named, the amount of water necessary to develop within the limits of the Chandler-Dunbar property the amount of horsepower which the existing works contemplated developing is to be considered as the amount so appropriated rather than the amount which will develop such power under the
802 additional head which has been permitted, and rather than the amount which will pass the head works in present condition."

CXIV.

The court erred in concluding and finding as matter of law, as concluded and found in conclusion of law number thirty-three, viz:

"Water sufficient to develop 6,500 theoretical horsepower is to be considered as surplus water capable of producing power, for which compensation should be awarded to the Chandler-Dunbar Company in this proceeding."

CXV.

The court erred in concluding and finding as matter of law, as concluded and found in conclusion of law number thirty-four, viz:

"Where private property is to be taken for a public improvement, the fact that the property is so situated that it is naturally suitable for such public improvement and may be desired therefor is one of the elements to be considered in determining just compensation, when it is so required and taken; but what it may be worth to the public for such improvement is not the proper measure."

CXVI.

The court erred in concluding and finding as matter of law, as concluded and found in conclusion number thirty-six, viz:

"The riparian proprietors are entitled to compensation for their appurtenant water power upon the basis of two-thirds of the outflow of Lake Superior (this ruling is not intended to involve the effect of the dominant, public rights, but only the question as between one-half or two-thirds of the flow)."

803 CXVII.

The court erred in concluding and finding as matter of law, as concluded and found in conclusion of law number thirty-eight, viz:

"The fact that there can be no commercial development of itself of the water power inchoate in the flow and fall of water over the

submerged lands appurtenant to Island No. 5 will not prevent an award of some compensation for the taking of such potential water power."

CXVIII.

The court erred in concluding and finding as matter of law, as concluded and found in conclusion of law number forty-one, viz:

"The so-called stragetic value, that is to say, its usefulness in permitting full and economical power development by other riparian owners, is an element to be considered in awarding compensation for Island No. 5."

CXIX.

The court erred in concluding and finding as matter of law as concluded and found in the following conclusion announced by him:

"The COURT. From the view taken of the facts and which will be specified in the findings of fact to be filed, it follows, as matter of law, that the compensation for the property and rights described in the petition should be fixed as follows: (b) To the St. Marys Falls Power Company, $21,000; (C) To the Chandler-Dunbar Water
804 Power Company, $652,312.00, this sum being made up as follows: For the raw water power, $550,000; * * * for the upland, excepting claims 95 and 96 ($65,000 less 7% on account of Portage Street subparcel), $60,450; claims 95 and 96, $25,000."

CXX.

The court erred in awarding to the respondent, the Chandler-Dunbar Water Power Company, as owner in fee simple of the first description in the petition for condemnation, the sum of twenty-five thousand ($25,000.00) dollars.

CXXI.

The court erred in awarding to the respondent, the Chandler-Dunbar Water Power Company, as owner in fee simple of the second description (excluding therefrom the third description and excluding therefrom the interests of the Edison Sault Electric Company), six hundred twenty-six thousand nine hundred seventy-four ($626,974.00) dollars.

CXXII.

The court erred in awarding to the respondent, Chandler-Dunbar Water Power Company, on account of the said first description, the sum of ten thousand ($10,000.00) dollars by reason of its desirability for lock and canal purposes, and the sum of five thousand ($5,000.00) dollars in connection with the land along the rapids if used as a part of the development of 6,500 horsepower.

CXXIII.

The court erred in awarding to said respondent, the Chandler-Dunbar Water Power Company, more than the sum of ten thousand ($10,000.00) dollars for said first description.

805 CXXIV.

The court erred in including in the award to the respondent, the Chandler-Dunbar Water Power Company, on account of the second description the sum of five hundred fifty thousand ($550,000.00) dollars for water power appurtenant to said upland.

CXXV.

The court erred in including in said award to the respondent, the Chandler-Dunbar Water Power Company, on account of said second description the sum of eighteen thousand six hundred ($18,600.00) dollars as a value for a factory site in connection with the development of 6,500 horsepower.

CXXVI.

The court erred in including in said award to the said respondent, the Chandler-Dunbar Water Power Company, on account of said second description the sum of twenty-three thousand two hundred fifty ($23,250.00) dollars value in connection with the probability that said lands would be needed for lock and canal or bridge purposes.

CXXVII.

The court erred in allowing the said respondent, the Chandler-Dunbar Water Power Company, on account of said second description any sum beyond the sum of thirty-five thousand one hundred twenty-four ($35,124.00) dollars.

CXXVIII.

The court erred in awarding to the said respondent, the Chandler-Dunbar Water Power Company, on account of all of its property involved herein any sum beyond the sum of forty-five
806 thousand four hundred sixty-two ($45,462.00) dollars.

CXXIX.

The court erred in including in the value of the sixth description, and in awarding to said sixth description, the sum of five thousand ($5,000.00) dollars by reason of its suitability for lock and canal purposes.

CXXX.

The court erred in awarding to said sixth description a strategic value of fifteen thousand ($15,000.00) dollars.

CXXXI.

The court erred in awarding to said sixth description more than the sum of one thousand ($1,000.00) dollars.

CXXXII.

The court erred in awarding and allowing five per cent upon said award or upon any part thereof after January 1st, 1910.

CXXXIII.

The court erred in adding to said awards the sum of one per cent, as provided in paragraph eight of said judgment and award.

Wherefore, the petitioner prays that the judgment of the Circuit (now District Court for the Western District of Michigan, Northern Division) may be reversed.

REEVES T. STRICKLAND,
Special Asst. Atty. Gen'l.,
FRED C. WETMORE,
U. S. Attorney,
WM. K. CLUTE and GRANT FELLOWS,
Special Asst. U. S. Attys.,
For Petitioner.

807 United States District Court, Western District of Michigan, Northern Division.

No. 638.

In the matter of the condemnation of all the lands north of the St. Marys Falls Ship Canal to the international boundary.

And now comes the United States, petitioner, by R. T. Strickland, Special Assistant Attorney General, Fred C. Wetmore, United States attorney, and Grant Fellows and William K. Clute, special assistant U. S. attorneys, and prays the allowance of a writ of error to remove the judgment, final award, and proceedings in this cause into the Supreme Court of the United States, in order that the United States, petitioner, may obtain a review in said Supreme Court of said proceedings, judgment, and final award, and that a citation may issue to the Chandler-Dunbar Water Power Company, also to the St. Marys Power Company, the Michigan Lake Superior Power Company, Clarence M. Brown, and Charles D. Warren, as receivers of the Michigan Lake Superior Power Company, the Real Estate Trust Company, trustee, and the United States Mortgage & Trust Company, defendants, pursuant to the laws of the

United States and the practice of this honorable court. Accompanying this application there is filed the petitioner's assignment of errors.

R. T. STRICKLAND,
Special Asst. Attorney General.
F. C. WETMORE,
United States Attorney.
GRANT FELLOWS and WM. K. CLUTE,
Special Asst. U. S. Attorneys.

808 A writ of error in the above entitled cause is hereby allowed and let a citation issue as prayed for in the foregoing petition.

Dated this 1st day of July, 1912.

C. W. SESSIONS, *District Judge.*

(Indorsed:) No. 638. United States District Court. Western District of Michigan, Northern Division. No. 638. In the matter of the condemnation of all the lands north of the St. Marys Falls Canal to the international boundary. Petition of U. S. for writ of error. Filed July 1, 1912. Chas. L. Fitch, deputy clerk. R. T. Strickland, special asst. Atty. General. Fred C. Wetmore, U. S. Attorney. Grant Fellows & Wm. K. Clute, special asst. U. S. attorneys.

810 The Supreme Court of the United States.

UNITED STATES OF AMERICA, *District of Columbia, ss:*

The President of the United States, to the honorable judge of the District Court of the United States for the Western District of Michigan, Northern Division, greeting:

Because in the record and proceedings, as also in the rendition of the judgment of the plea which is in the said district court before you between:

In the matter of the petition of the United States for the condemnation of all the lands north of the present St. Marys Falls Ship Canal throughout its entire length and lying between said ship canal and the international boundary at Sault Ste. Marie, Michigan.

THE UNITED STATES, PETITIONER AND CONDEMNOR,
vs.
THE CHANDLER-DUNBAR WATER POWER COMPANY, the Michigan Lake Superior Power Company, the St. Marys Power Company, Charles D. Warren and Clarence M. Brown, as receivers of the Michigan-Lake Superior Power Company, the Real Estate Trust Company, trustee, and the United States Mortgage and Trust Company, defendants and condemnees.

811 a manifest error hath happened, to the great damage of the said United States, petitioner, as by its complaint appears.

The position of the parties in the United States Supreme Court is as follows:

THE UNITED STATES, PETITIONER, PLAINTIFF IN ERROR,
vs.
THE CHANDLER-DUNBAR WATER POWER COMPANY, the St. Marys Power Company, the Michigan Lake Superior Power Company, Clarence M. Brown and Charles D. Warren, as receivers of the Michigan-Lake Superior Power Company, the Real Estate Trust Company, trustee, and the United States Mortgage & Trust Company, defendants in error.

We being willing that error, if any hath been, should be duly corrected and full and speedy justice done to the parties aforesaid in this behalf, do command you, if judgment be therein given, that then under your seal, distinctly and openly, you send the record and proceedings aforesaid, with all things concerning the same, to the Supreme Court of the United States, together with this writ, so that you have the same at the city of Washington, in the District of Columbia, on the 31st day of July next, in the said Supreme Court of the United States, to be then and there held, that the record and proceedings aforesaid being inspected, the said Supreme Court of the United States may cause further to be done therein to
812 correct that error, what of right and according to the laws and customs of the United States should be done.

Witness the Honorable Edward Douglas White, Chief Justice of the United States, the first day of July, in the year of our Lord one thousand nine hundred and twelve, and of the Independence of the United States of America the one hundred and thirty-sixth.

[SEAL.] CHAS. J. POTTER,
Clerk of the District Court of the United States for the Western District of Michigan.

Allowed by—

CLARENCE W. SESSIONS,
District Judge.

813 (Indorsed:) No. 638. The Supreme Court of the United States. United States, plaintiff in error, vs. The Chandler-Dunbar Water Power Company et al., defendants in error. Writ of error. Filed Jul. 1, 1912. Chas. L. Fitch, deputy clerk.

814 The Supreme Court of the United States.

UNITED STATES OF AMERICA, *District of Columbia, ss:*

The President of the United States, to the honorable judge of the District Court of the United States for the Western District of Michigan, Northern Division, greeting:

Because in the record and proceeding, as also in the rendition of the judgment of the plea which is in the said District Court before you between:

In the matter of the petition of the United States for the condemnation of all the lands north of the present St. Marys Falls Ship Canal throughout its entire length and lying between said ship canal and the international boundary at Sault Ste. Marie, Michigan.

THE UNITED STATES, PETITIONER AND CONDEMNOR,
vs.
THE CHANDLER-DUNBAR WATER POWER COMPANY, THE Michigan-Lake Superior Power Company, the St. Marys Power Company, Charles D. Warren and Clarence M. Brown, as receivers of the Michigan-Lake Superior Power Company, the Real Estate Trust Company, trustee, and the United States Mortgage and Trust Company, defendants and condemnees.

815 a manifest error hath happened, to the great damage of the said United States, petitioner, as by its complaint appears.

The position of the parties in the United States Supreme Court is as follows:

THE UNITED STATES, PETITIONER, PLAINTIFF IN ERROR,
vs.
THE CHANDLER-DUNBAR WATER POWER COMPANY, THE St. Marys Power Company, the Michigan-Lake Superior Power Company, Clarence M. Brown and Charles D. Warren, as receivers of the Michigan-Lake Superior Power Company, the Real Estate Trust Company, trustee, and the United States Mortgage & Trust Company, defendants in error.

We being willing that error, if any hath been, should be duly corrected, and full and speedy justice done to the parties aforesaid in this behalf, do command you, if judgment be therein given, that then under your seal, distinctly and openly, you send the record and proceedings aforesaid, with all things concerning the same to the

Supreme Court of the United States, together with this writ, so that you have the same at the city of Washington, in the District of Columbia, on the 31st day of July next, in the said Supreme Court of the United States, to be then and there held, that the record and proceedings aforesaid being inspected, the said Supreme Court of the United States may cause further to be done therein to correct that error, what of right, and according to the laws and cus-
816 toms of the United States, should be done.

Witness the Honorable Edward Douglas White, Chief Justice of the United States, the first day of July, in the year of our Lord one thousand nine hundred and twelve and of the Independence of the United States of America the one hundred and thirty-sixth.

[L. S.] (Sd) CHAS. J. POTTER,
Clerk of the District Court of the United States for the Western District of Michigan.

Allowed by—

CLARENCE W. SESSIONS,
District Judge.

(Endorsed:) No. 638. The Supreme Court of the United States. United States, plaintiff in error, vs. the Chandler-Dunbar Water Power Company et al., defendants in error. Copy of writ of error. Deposited for defendants in error, July 1, 1912. Chas. L. Fitch, deputy clerk.

817 Original.

The Supreme Court of the United States.

UNITED STATES OF AMERICA,
Western District of Michigan, Northern Division, ss:

To the Chandler-Dunbar Water Power Company, the St. Marys Power Company, the Michigan Lake Superior Power Company, Charles D. Warren and Clarence M. Brown as receivers of the Michigan Lake Superior Power Company, the United States Mortgage & Trust Company, the Real Estate Trust Company, Trustee, greeting:

You are hereby cited and admonished to be and appear at a session of the Supreme Court of the United States to be holden at the city of Washington, in the District of Columbia, on the 31st day of July next, pursuant to a writ of error filed in the clerk's office of the District Court of the United States for the Western District of Michigan, Northern Division, wherein the United States of America is plaintiff in error and you are defendants in error, to show cause, if any there be, why the judgment and award rendered against the said plaintiff in error, as in the said writ of error mentioned, should not be corrected, and why speedy justice should not be done to the parties in that behalf.

Witness the Honorable Edward Douglas White, Chief Justice of the United States, this first day of July, in the year of our Lord 1912 and of the independence of the United States of America the one hundred and thirty-sixth.

C. W. SESSIONS, *District Judge.*

I hereby, this 10th day of July, A. D. 1912, accept due personal service of this citation in behalf of the Chandler-Dunbar Water Power Company, respondent.

JOHN H. GOFF,
Attorney for the Chandler-Dunbar Water Power Company, Respondent.

We hereby, this 10th day of July, 1912, accept due personal service of this citation in behalf of the Saint Marys Power Company and Clarence M. Brown and Charles D. Warren, as receivers of the Michigan Lake Superior Power Company, defendants and appellees.

STEVENSON, CARPENTER & BUTZEL,
Attorneys for the St. Marys Power Company and Clarence M. Brown and Charles D. Warren, as receivers of the Michigan Lake Superior Power Company.

I hereby, this 10th day of July, 1912, accept due personal service of this citation in behalf of the Michigan Lake Superior Power Company, defendant and appellee.

LEO M. BUTZEL,
Attorney for the Michigan Lake Superior Power Company.

We hereby, this 12th day of July, 1912, accept due personal service of this citation in behalf of the United States Mortgage and Trust Company, defendant and appellee.

KLEINHAUS & KNAPPEN,
Attorneys for the United States Mortgage & Trust Company.

I hereby, this 19th day of July, 1912, accept due personal service of this citation in behalf of the Real Estate Trust Company of Philadelphia, trustee, defendant and appellee.

A. S. WEILL,
Attorney for the Real Estate Trust Co. of Phila., Trustee.

818 (Indorsed:) Original. Supreme Court of the United States. The United States, plaintiff in error, vs. the Chandler-Dunbar Water Power Company, et al., defendants in error. Citation. Filed July 23, 1912. Fred J. Schultheis, dep. clerk.

819 STATE OF MICHIGAN,
County of Wayne, ss:

FRED W. FLOTT, of Detroit, Wayne County, Michigan, being first duly sworn, deposes and says that on the 15th day of April, A. D. 1912, he served a notice, of which the attached is a copy, upon Sherman T. Handy, attorney for the city of Sault Ste. Marie, Sault Ste. Marie, Michigan, by depositing the same in a sealed envelope, in the United States mail, with postage fully prepaid, and plainly addressed, "Sherman T. Handy, Esq., attorney for the city of Sault Ste. Marie, Sault Ste. Marie, Michigan." That he served a like notice upon A. S. Weill, 1418 Land Title Building, Philadelphia, Pa., by depositing the same in a sealed envelope in the United States mail, with postage fully prepaid, and plainly addressed, "A. S. Weill, Esq., 1418 Land Title Building, Philadelphia, Pa." That he served a like notice upon William K. Clute, special assistant United States attorney, Grand Rapids, Michigan, by depositing the same in a sealed envelope, in the United States mail, with postage fully prepaid, and plainly addressed, "William K. Clute, Esq., special assistant United States attorney, Grand Rapids, Michigan." That he served a like notice upon Stevenson, Carpenter & Butzel, and also Leo M. Butzel, by delivering a copy thereof to Joseph LePage, a clerk in their offices, at 1324–29 Ford Building, Detroit, Michigan.

FRED. W. FLOTT.

Subscribed and sworn to before me this 22 day of April, A. D. 1912.

JOHN P. ARTISDEL,
Notary Public, Wayne County, Michigan.

My commission expires Dec. 19th, 1914.

820 In District (formerly Circuit) Court of the United States for the Western District of Michigan, Northern Division.

UNITED STATES, PETITIONER,
vs.
CHANDLER-DUNBAR WATER POWER COMPANY, IMPLEADED with the city of Sault Ste. Marie, the Michigan Lake Superior Power Company, Charles M. Brown and Charles D. Warren, as receivers of the Michigan-Lake Superior Power Company, the Real Estate Trust Company of Philadelphia, the United States Mortgage and Trust Company of New York, and others, respondents.

GENTLEMEN: The proposed bill of exceptions of the Chandler-Dunbar Water Power Company in the above-entitled cause, heretofore served upon you, will be brought before the Hon. A. C. Denison, circuit judge, at chambers, at Grand Rapids, Michigan, on

April 25th, 1912, at 10 o'clock in the forenoon, or as soon thereafter as counsel can be heard for settlement and signing.

Kindly acknowledge receipt of this notice at once.

Yours,

JOHN H. GOFF,
Attorney for Chandler-Dunbar Water Power Company.

To—

WILLIAM K. CLUTE, Esq.,
Special Assistant United States Attorney.

SHERMAN T. HANDY, Esq.,
Attorney for the City of Sault Ste. Marie.

A. S. WEILL, Esq.,
Attorney for the Real Estate Trust Company of Philadelphia.

LEO M. BUTZEL, Esq.,
Attorney for the St. Marys Power Company.

STEVENSON, CARPENTER & BUTZEL, Esq.,
Attorneys for Charles M. Brown and Charles D. Warren, as Receivers of the Michigan-Lake Superior Power Company.

Due notice of the foregoing is accepted.

ARTHUR WEBSTER,
Atty. for Standard Trust Co.

DETROIT, *April 23/12.*

821 (Indorsed:) Original. In District Court of the United States for the Western District of Michigan, Northern Division. United States, petitioner, vs. Chandler-Dunbar Water Power Company et al., respondents. Proof of service of notice of settlement of bill of exceptions. Filed May 6, 1912. Chas. L. Fitch, deputy clerk. John H. Goff, atty. for Chandler-Dunbar Water Power Company, 310 Union Trust Building, Detroit, Michigan.

822 United States District Court for the Western District of Michigan, Northern Division.

No. 638.

In the matter of the condemnation of all the lands north of the St. Marys Falls Ship Canal to the international boundary.

WM. K. CLUTE, one of the attorneys for petitioner in this matter, being duly sworn, deposes and says that, on the 17th day of June, 1912, he served a true copy of the assignments of error of the United States, filed in this cause, upon John H. Goff, attorney for the Chandler-Dunbar Water Power Co., and also upon Stevenson, Carpenter & Butzel, attorneys for the St. Marys Power Co., and Clarence M. Brown and Chas. D. Warren, as receivers of the Mich. Lake Sup.

Power Company; also upon Leo M. Butzel, attorney for the Mich. Lake Superior Power Co., by 1st, as to Goff, by inclosing the same in a sealed package, addressing it to John H. Goff, Union Trust Bldg., Detroit, Mich., and depositing the same in the U. S. post office at Grand Rapids, Mich., on said date, the same being sent under U. S. attorney's frank, requiring no postage; 2nd, as to Stevenson, Carpenter & Butzel and Leo M. Butzel, by inclosing the same in a sealed package, addressed to Stevenson, Carpenter & Butzel and Leo M. Butzel, Ford Bldg., Detroit, Mich., and depositing same in the U. S. post office at Grand Rapids, Mich., same being sent under the U. S. attorney's frank, requiring no postage. The above addresses are the business addresses of the said attorneys.

WM. K. CLUTE.

Subscribed and sworn to before me this 17th day of June, 1912.

GETA V. GODWIN,
Notary Public, Kent Co., Mich.

My commission expires April 26, 1915.

823 (Indorsed:) 638. United States District Court, Western District of Michigan, Northern Division. In the matter of the condemnation of all the lands north of the St. Marys Falls Ship Canal to the international boundary. No. 638. Affidavit of service of assignment of errors. Filed June 18, 1912. Fred J. Schuteheis, dep. clerk.

824 United States District Court for the Western District of Michigan, Northern Division.

No. 638.

In the matter of the condemnation of all the lands north of the St. Marys Falls Ship Canal to the international boundary.

Service upon us, as attorneys for the United States Mortgage & Trust Company of New York, of a copy of the assignments of error of the United States, filed in this cause, is hereby waived.

KLEINHANS & KNAPPEN,
Attorneys for United States Mortgage & Trust Company of New York.

(Indorsed:) No. 638. U. S. Dist. Court, West. Dist. Mich., No. Div. In re condemnation of lands north of ship canal to inter'l boundary. Waiver service asst. of errors by U. S. Mort. & Trust Co. Filed June 18, 1912. Fred J. Schuteheis, dep. clerk.

825 U. S. District Court, Western District of Michigan, Northern Division.

No. 638.

In the matter of the condemnation of all the lands north of the St. Marys Falls Ship Canal to the international boundary.

WESTERN DISTRICT OF MICHIGAN, SOUTHERN DIVISION, *ss:*

WM. K. CLUTE, being duly sworn, deposes and says that he is one of the attorneys for the United States in this proceeding; that on the first day of August, 1912, he served a copy of the assignments of error of the United States on A. S. Weill, attorney for the Real Estate Trust Company, one of the defendants in these proceedings, by enclosing the same in a sealed package under a United States attorney's franked envelope requiring no postage, to A. S. Weill, Esquire, attorney, #1418 Land Title Building Philadelphia, Pennsylvania, that being his business address, and depositing the same in the United States mails at the United States post office in the city of Grand Rapids, Michigan.

WM. K. CLUTE.

Subscribed and sworn to before me this first day of August, 1912.

JANET E. TODD,
Notary Public, Kent County.

My commission expires Nov. 19, 1912.

826 (Indorsed:) No. 638. In the District Court of the United States for the Western District of Michigan. In the matter of the condemnation of all the lands north of the St. Marys Falls Ship Canal to the international boundary. No. 638. Proof of service of U. S. assignments of error on A. S. Weill. Filed August 3, 1912. Charles J. Potter, clerk, by Fred J. Schuteheis, deputy.

827 United States District Court for the Western District of Michigan, Northern Division.

No. 638.

In the matter of the condemnation of all the lands north of the St. Marys Falls Ship Canal to the international boundary.

WESTERN DISTRICT OF MICHIGAN, SOUTHERN DIVISION, *ss:*

WM. K. CLUTE, one of the attorneys for the petitioner in the above-entitled matter, being duly sworn, deposes and says, that on the first day of July, 1912, he served a copy of the annexed præcipe to the clerk for making up record on return of writ of error, and also a notice, of which the annexed is a copy, on the following attorneys for the parties designated: John H. Goff, attorney for the Chandler-

Dunbar Water Power Co., Union Trust Bldg., Detroit, Mich.; Stevenson, Carpenter & Butzel, attorneys for the St. Marys Power Company, Ford Bldg., Detroit, Mich.; and also for Clarence M. Brown and Charles D. Warren as receivers, etc.; Leo M. Butzel, attorney for the Michigan Lake Superior Power Company, Ford Bldg., Detroit, Mich.; Kleinhans & Knappen, attorneys for the U. S. Mortgage & Trust Co., Michigan Trust Bldg., Grand Rapids, Mich.; A. S. Weill, attorney for the Real Estate Mortgage & Trust Co., trustee, 1418 Land Title Bldg., Philadelphia, Pa., by inclosing said copy and said notice for each in a U. S. attorney's franked envelope, which requires no postage, and addressing the same to each of said attorneys and to their business addresses as above indicated,
828 sealing the same, and depositing each package so addressed and sealed in the United States post office in the city of Grand Rapids on said date.

WM. K. CLUTE.

Subscribed and sworn to before me this 1st day of July, 1912.

GETA V. GODWIN,
Notary Public, Kent County, Mich.

My commission expires April 26, 1915.

829 United States District Court for the Western District of Michigan, Northern Division.

No. 638.

In the matter of the condemnation of all the lands north of the St. Marys Falls Ship Canal to the international boundary.

JOHN H. GOFF,
Attorneys for the St. Marys Power Company, Ford Bldg., Trust Bldg., Detroit, Mich.
STEVENSON, CARPENTER & BUTZEL,
Attorneys for the St. Marys Power Company, Ford Bldg., Detroit, Mich., and also for Clarence M. Brown and Charles D. Warren as receivers, etc.
LEO M. BUTZEL,
Attorney for the Michigan Lake Superior Power Company, Ford Bldg., Detroit, Mich.
KLEINHANS & KNAPPEN,
Attorneys for the U. S. Mortgage & Trust Co., Michigan Trust Bldg., Grand Rapids, Mich.
A. S. WEILL,
Attorney for the Real Estate Mortgage & Trust Co., Trustee, 1418 Land Title Bldg., Philadelphia, Pa.

GENTLEMEN: You will please to take notice that the præcipe to the clerk, a copy of which you are herewith served, has been filed in

said cause with the clerk of the District Court for the Western District of Michigan, Northern Division.

Dated July 1st, 1912.

Respectfully,

R. T. STRICKLAND,
Special Asst. Atty. General.
F. C. WETMERE,
U. S. Attorney.
GRANT FELLOWS &
WM. K. CLUTE,
Special Asst. U. S. Attorneys.

830 United States District Court for the Western District of Michigan, Northern Division.

No. 638.

In the matter of the condemnation of all the lands north of the St. Marys Falls Ship Canal to the international boundary.

To the clerk of the United States District Court for the Western District of Michigan, Northern Division:

Take notice that in making your return to the writ of error of the United States Supreme Court which has been issued herein, you will please include in the making up of the record and return the following list of papers and records in the cause, viz:

1. Petition of the United States and map filed accompanying it.
2. Answer of Chandler-Dunbar Water Power Company.
3. Order permitting amendments to the petition and to include additional parties.
4. Amendments to the petition.
5. Motion to sustain the petition.
6. Order continuing hearing on motion.

831 7. Answer of city of Sault Ste. Marie.

8. Answer of U. S. Mortgage & Trust Company.
9. Order of Oct. 12, 1910, extending time of hearing on motion to Oct. 18, 1910.
10. Order of Oct. 18, 1910, extending time of hearing on motion to Oct. 24, 1910.
11. Order of Oct. 24, 1910, sustaining petition and extending time of hearing to Dec. 6, 1910, and for trial before court without jury.
12. Stipulation of all parties waiving jury trial, also appearances of all parties defendants.
13. Proof of service of copy of order fixing time of hearing, &c., for Dec. 6th.
14. Order of Dec. 3, 1910, fixing Jan. 10th, 1911, as day to commence proof.
15. Order of adjournment of taking proofs from Jan. 10, 1911, to Feb. 21, 1911.

16. Proof of service notice of hearing for Feb. 21, 1911.
17. Request of United States for findings of law and fact filed.
18. Requests of United States, the Chandler-Dunbar Water Power Company, the St. Marys Power Company, and the Michigan Lake Superior Power Company for findings of fact. (These were separate papers, but were attached together by the court and filed as one paper.)
19. Specific requests of United States for conclusions of law.
20. Findings of fact.
21. Motion of United States to limit award. (Power value.)
22. Order overruling same.
23. Motion of United States to limit recovery. (Way of necessity.)
24. Order overruling same.

832 25. Substituted exceptions of the United States to the findings of fact.

26. Order permitting same to be filed.
27. Findings of law.
28. Substituted exceptions of United States to conclusions of law.
29. Order permitting same to be filed.
30. Substituted exceptions of the United States to the refusal to conclude on law as requested by the United States.
31. Order permitting same to be filed.
32. Exceptions of the United States to granting the defendant Chandler-Dunbar Company's requests on conclusions of law.
33. Exceptions of United States to approval of St. Marys Power Company and Michigan Lake Superior Power Company's conclusions of law.
34. Consent to substitution of Attorney John H. Goff instead of A. B. Eldredge for the Chandler-Dunbar Water Power Co.
35. Exceptions by the United States to paragraph 51 of conclusions of law.
36. Order permitting same to be filed.
37. Final award.
38. Exceptions of United States to final award.
39. Order permitting same to be filed.
40. Order of designation of Circuit Judge Arthur C. Denison to act in this case.
41. Bill of exceptions.
42. Stipulation regarding exhibits which accompany bill of exceptions.

833 43. The original exhibits specified in foregoing stipulation.
44. Opinion of Judge Denison.

45. Assignments of error.
46. Petition for writ of error and order allowing same.
47. Præcipe for writ of error.
48. Præcipe for papers, etc., to be returned as the record.
49. Citation and proof of service.
50. Affidavit showing service of bill of exceptions and notice of settlement.

51. Waiver of service of bill of exceptions by U. S. Mortgage & Trust Company.
52. Affidavit showing service of assignment of errors.
53. Waiver of service of assignment of errors to U. S. Mortgage & Trust Co.
Dated July 1st, 1912.

R. T. STRICKLAND,
Special Asst. Atty. Gen'l.
F. C. WETMORE,
U. S. Attorney.
GRANT FELLOWS & WM. K. CLUTE,
Special Asst. U. S. Attorneys.

834 (Indorsed:) No. 638. United States District Court for Western District of Michigan, Northern Division. No. 638. In the matter of the condemnation of all the lands north of the St. Marys Falls Ship Canal to the international boundary. Præcipe to the clerk for making up record on return of writ of error and notice. Proof of service of same. Filed July 2, 1912. Fred J. Schultheis, dep. clerk.

835 *Exceptions by Chandler-Dunbar Water Power Company to findings of fact.*

836 In the Circuit Court of the United States for the Western District of Michigan, Northern Division.

UNITED STATES, PETITIONER,
vs.
CHANDLER-DUNBAR WATER POWER COMPANY, IMPLEADED with others, respondents. } No. 638.

Now comes the respondent, the Chandler-Dunbar Water Power Company, and excepts to the findings of fact found by the court herein, as follows:

I.

Said respondent excepts to those clauses in the Finding of Fact No. IX which are as follows:

"As to all the property described, a necessity for taking, for public use, exists, as matter of fact.

"The necessity for taking all, as applied to the facts here, is a necessity of peculiar character. It may be called a constructive, as distinguished from an actual, necessity. As to the excess beyond a certain amount of land and water, the taking is secondary and incidental to the taking of the primary body now needed," on account that such parts of said finding are contrary to the proofs in the case.

837

II.

Said respondent excepts to that clause in Finding No. XI which is as follows:

"and this (64,000 c. s. f.) is the proper measure for this case" on account that said finding is contrary to the proofs in the case and that, according to the proofs, it appears that 75,000 c. s. f. is the proper measure for this case.

Said respondent also excepts to that part of Finding No. XI which is as follows: "The general well-known alarm about lowering lake levels, and fear of still lower, would, in the mind of an intending purchaser and his advising engineers, counterbalance the theoretical possibility of rising levels," on account that such matter is pure speculation and not matter for consideration in the case.

III.

Said respondent excepts to Finding No. XV, which is as follows: "The proper basis for capitalization is ten per cent," on account that said finding is contrary to the proofs in the case as matter of fact and that as a conclusion of law such is not the law.

IV.

Said respondent excepts to that clause in Finding of Fact No. XVII which is as follows: "The increase in navigation has been on geometrical ratio" on account that said finding is contrary to the proofs in the case.

838

V.

Said respondents excepts to that clause in Finding of Fact No. XVIII, which is as follows: "Such development wholly upon the submerged land would have carried unusual expense and contingencies," on account that said finding is contrary to the proofs in the case.

VI.

Said respondent excepts to all of Finding No. XIX except the first sentence thereof, on account that it is not competent to consider such contingencies.

VII.

Said respondent excepts to all of Finding of Fact No. XXI after the first sentence thereof, on account that it is not competent to consider such contingencies.

VIII.

Said respondent excepts to all of Finding of Fact No. XXII on account that same does not state (as the proofs show the fact to be) that such licenses were issued by the Secretary of War, revocable at his pleasure.

IX.

Said respondent excepts to all of Finding of Fact No. XXIII, on account that the same does not state (as the proofs show the fact to be) that the dike or dam contemplated by respondent was to extend up, on, or near (instead of along) the international boundary.

Said respondent also excepts to the last sentence thereof,
839 which is as follows: "There is no clear authority therefor, and, in the absence of further legislation, the engineering officers might find room, within the limits of sound discretion and good faith, to refuse such permit," on account that it is not competent to consider such contingencies, and on account that the court should proceed upon the supposition that the riparian would be permitted to make the best use of his property which it was practicable for him to make without injury to navigation or the full development thereof.

X.

Said respondent excepts to that part of Finding of Fact No. XXIV, which is as follows: "Artificial causes like the Chicago Drainage Canal contribute," on account that it is not competent to consider such contingencies.

Said respondent also excepts to that part of the same which is as follows: "Both of these things have been done," on account that it appears from the proofs that the natural outflow of Lake Superior has only been increased once for the benefit of the lower lakes, and then at a time of extraordinary low water, such as occurs once in forty to fifty years.

Said respondent also excepts to that part of the same which is as follows: "During part of every year, during recent years, the United States engineers have wholly stopped the flow of water through the Michigan-Lake Superior Power Canal, thus greatly lessening its value as a power producer," on account that the proofs show that with proper remedial works, such as contemplated by the Chandler-Dunbar Water Power Company and the United States and Canada, no such stoppage of flow through the Michigan-Lake Superior Power Canal would be necessary.

XI.

Said respondent excepts to all of Finding of Fact No.
840 XXVIII following the first period thereof on account that the erection of the structure therein named by the Chandler-

Dunbar Water Power Company would have been practicable and desirable if its property had not been taken, and is practicable and desirable on the part of the United States in the improvement of navigation, and is contemplated by the United States, and the lands of the Chandler-Dunbar Water Power Company offer the most favorable location for the same as appears by the proofs.

XII.

Said respondent excepts to all of Finding of Fact No. XXXI, on account that it must be supposed that an equitable adjustment of the flow of the river will be made between the United States and Canada and such flow regulated accordingly.

XIII.

Said respondent excepts to all of Finding of Fact No. XXXII, on account that it must be supposed that an equitable adjustment of the flow of the river will be made between the United States and Canada and such flow regulated accordingly.

XIV.

Said respondent excepts to all of Finding of Fact No. XXIX, on account that any supposition that the diversion of water into and through the Michigan-Lake Superior Power Canal was "not to diminish the flow of water through the rapids on the American side" was not entertained after Dec. of 1901.

XV.

Said respondent excepts to that clause of Finding of Fact No. XLI which is as follows: "The amount of water sufficient to develop 6,500 horsepower (4,500 electrical) on the property of the Chandler-
841 Dunbar Company—that is, on a 9-foot effective fall—is the proper figure to be taken in this connection," on account that said finding is contrary to the proofs in the case, and on account that the proofs show that a very much larger flow of water is the proper figure to be taken in this connection, and it excepts to the same as a conclusion of law on account that such is not the law.

XVI.

Said respondent excepts to that clause of Finding of Fact No. XLIII which is as follows: "A present value of $550,000;" that is, to that part of the finding which holds that a water power which has an annual rental value of $55,000 has a present value of only $550,000, on account that the finding should be, as a matter of fact and a matter of law, that a property which has an annual rental value of $55,000 has a present value of $1,100,000.

XVII.

Said respondent excepts to that clause of Finding of Fact No. XLIX which is as follows: "Later in 1879, pursuant to this survey, patent was granted to lot 3, described simply as 'Lot 3,'" on account that it is contrary to the proofs in this case, and on account that the patent to said lot 3 describes the same as being "according to the official plat of the survey of said lands returned by the surveyor general," that the field notes of said village lot 3 for one boundary thereof was "North 77 degrees 10 minutes west along the south side of Portage Street, right bank River St. Mary.

842 XVIII.

Said respondent excepts to that clause of Finding of Fact No. LX which is as follows: "Such provision was sufficient for ordinary conditions," on account that the proofs show that such works were sufficient for the passage through them of ice without limitation to "ordinary conditions," and were safe for any conditions to be reasonably anticipated.

XIX.

Said respondent excepts to Finding of Fact No. LXXI on account that the same does not state that the power to revoke permits was reserved to the Secretary of War exclusively as the proofs show the fact to be.

J. H. GOFF,
Attorney for Chandler-Dunbar Water Power Company.
MOSES HOOPER,
Of Counsel.

(Endorsed:) No. 638. U. S. Circuit Court Westn. Dist. Mich., Northn. Divn. United States vs. Chandler-Dunbar Water Power Company. Exceptions to findings of fact. Filed Dec. 28, 1911. Chas. L. Fitch, clerk. J. H. Goff, atty. for Chandler-Dunbar Water Power Co.

843 *Exceptions of Chandler-Dunbar Water Power Company to conclusions of law.*

844 In the Circuit Court of the United States for the Western District of Michigan, Northern Division.

UNITED STATES, PETITIONER,
vs.
THE CHANDLER-DUNBAR WATER POWER COMPANY, IMpleaded with others, respondent. } No. 638.

Now comes the Chandler-Dunbar Water Power Company, respondent, and except to the conclusions of law formulated and adopted by the court as follows:

It excepts to conclusion No. 2 on account that such is not the law.

It excepts to conclusion No. IV on account that such is not the law.

It excepts to conclusion No. VIII on account that such is not the law.

It excepts to conclusion No. IX on account that such is not the law.

It excepts to conclusion No. X on account that such is not the law.

It excepts to conclusion No. XI on account that such is not the law.

It excepts to conclusion No. XII on account that such is not the law.

It excepts to conclusion No. XIII on account that such is not the law.

845 It excepts to conclusion No. XIV on account that such is not the law.

It excepts to conclusion No. XV on account that such is not the law.

It excepts to conclusion No. XVI on account that such is not the law.

It excepts to conclusion No. XVIII on account that such is not the law.

It excepts to conclusion No. XX on account that such is not the law.

It excepts to conclusion No. XXIII on account that such is not the law.

It excepts to conclusion No. XXIV on account that such is not the law.

It excepts to conclusion No. XXV on account that such is not the law.

It excepts to conclusion No. XXVI on account that such is not the law.

It excepts to conclusion No. XXVIII on account that such is not the law.

It excepts to conclusion No. XXIX on account that such is not the law.

It excepts to conclusion No. XXX on account that such is not the law.

It excepts to conclusion No. XLVII on account that such is not the law.

It excepts to conclusion No. L on account that such is not the law.

Dated Dec. 27, 1911.

J. H. GOFF,
Atty. for Respondent, Chandler-Dunbar Water Power Company.

MOSES HOOPER,
Of Counsel.

846 (Endorsed:) No. 638. U. S. Circuit Court, Westn. Dist. Mich., Northn. Divn. United States vs. Chandler-Dunbar Water Power Co. Respondent's exceptions to conclusions of law. Filed Dec. 28, 1911. Chas. L. Fitch, clerk. J. H. Goff, atty. for Chandler-Dunbar Water Power Co.

847 *Exceptions by Chandler-Dunbar Water Power Company to disapproval and refusal of conclusions of law requested by it.*

848 In the Circuit Court of the United States for the Western District of Michigan, Northern Division.

UNITED STATES, PETITIONER,
vs.
THE CHANDLER-DUNBAR WATER POWER COMPANY, IMpleaded with others, respondent. } No. 638.

And now comes the respondent, Chandler-Dunbar Water Power Company, and excepts to the disapproval and refusal of conclusions of law requested by it.

I.

Section 11 of the act of Congress approved March 3, 1909, read in the light of the report of the Rivers and Harbors Committee recommending the passage thereof, indicates an intention on the part of Congress to provide for payment to the Chandler-Dunbar Water Power Company of the value of the water power existing on its lands.

Disapproved; so broadly stated.

Whereupon this respondent excepted to such disapproval and refusal.

849 II.

When the title of the riparian to the bed and flow of the waters of public navigable rivers is taken by the United States, it must make just compensation for the taking of title, the use being all that is primarily subject to be taken for the purpose of navigation.

Disapproved, so broadly stated.

Whereupon this respondent excepted to such disapproval and refusal.

III.

The proper and primary right of the United States to the bed and flow of water of public navigable rivers is to use and manipulate the same in the interest of navigation, and it has no power under that claim of right to take the fee title in either the bed or the flow without just compensation for such taking.

Disapproved, so broadly stated; the proper use may be so absolute and permanent that there is no remaining fee of any substantial value.

Whereupon this respondent excepted to such disapproval and refusal.

IV.

The United States has taken the title to the bed and flow of the St. Marys River, which was property of the Chandler-Dunbar Water

Power Company, as a riparian, subject to the paramount right of the United States to use same for purposes of navigation, and of the State of Michigan to use same for purposes of navigation, fishing, bathing, and perhaps municipal water supply.

850 Disapproved, as to possible interpretations of the last sentence.

Whereupon this respondent excepted to such disapproval and refusal.

V.

The question is, what would the bed and flow of the river appurtenant to the Chandler-Dunbar Water Power Company uplands have probably been worth to that company, or to its successors in title, if the United States had condemned the upland and from time to time taken only so much of the bed and flow as it might need for fullest development and improvement in aid of navigation?

Disapproved, as applied to facts of this case.

Whereupon this respondent excepted to such disapproval and refusal.

VI.

Such use of the flow of the water and submerged land for private proprietary purposes as it appears probable that the United States may and will make, or can properly make, should be supposed to have been within the capacity of the *of the* riparian to make; and just compensation should be fixed on such basis.

Disapproved.

Whereupon this respondent excepted to such disapproval and refusal.

VII.

In considering the just compensation to be awarded the Chandler-Dunbar Water Power Company on account of the taking of title to this water power, it must be supposed that the United States, while fostering to the utmost the interests of and improvement of navigation, would not cause any interference with or diminution of

851 the value of such riparian water power beyond such interference or diminution as would be necessary for such fostering of and improvement of navigation.

Approved; but this involves considering the character and extent of the controlling necessity.

Whereupon this respondent excepted to such modification of approval.

VIII.

Just compensation requires the allowance to the Chandler-Dunbar Water Power Company of the value of the use of the water which the United States has planned to divert into the power canal of the Michigan-Lake Superior Company and to lease by the United States for power purposes. Such allowance not to exceed the value of the

use of the same by the Chandler-Dunbar Water Power Company on its submerged lands.

Disapproved.

Whereupon this respondent excepted to such disapproval and refusal.

IX.

Just compensation requires the allowance to the Chandler-Dunbar Water Power Company of the value of the use of the water which the United States has planned to impound by the present works being now constructed in the bed of the river for power purposes. Such allowance not to exceed the value of the use of the same by the Chandler-Dunbar Water Power Company on its submerged lands.

Disapproved.

Whereupon this respondent excepted to such disapproval and refusal.

852 X.

The compensation to which the Chandler-Dunbar Water Power Company is entitled for its property taken cannot be substantially less than the property—proprietary—value acquired by the United States by the taking.

Approved; but the United States now acquires, by the taking, only that servient (in a certain sense) interest which it did not already possess.

Whereupon this respondent excepted to such modification of approval.

XI.

The United States, by its taking title for other purposes than public and governmental—that is, for the purpose of creating water power for private—proprietary—use for revenue—has put upon the court the necessity of calculation of the extent and effect of uncertain elements. Hence, the burden of proof is upon the United States as to the extent and effect of such uncertain elements.

Disapproved.

Whereupon this respondent excepted to such disapproval and refusal.

XII.

It appearing that the United States has taken the title to the bed and flow of the St. Marys River belonging to the Chandler-Dunbar Water Power Company, instead of or in addition to the use, and that there is an excess of flow and bed over and above that part, the present use of which is needful for purposes of navigation, and that such excess of flow and bed is of value to the riparian for power purposes, the burden of proof to show the diminution of such value on account of the dominant estate of the United States to use the same in the interest of navigation rests upon the United States.

853 Disapproved.

Whereupon this respondent excepted to such disapproval and refusal.

XIV.

It is not competent for the United States to reduce, without just compensation, the water power of the riparian upon the St. Marys River by artificially increasing the discharge from Lake Superior through the St. Marys River in order to counteract the effect upon Lake Michigan-Huron caused by the outflow through the Chicago Drainage Canal.

Disapproved, it being understood that the request contemplates increasing the discharge by means which would not increase the flow over the lands of the riparian. I do not think the question with reference to the Chicago Drainage Canal alone exists, but do think that controlling the relative levels of all the Great Lakes, by whatever cause such relative levels might otherwise be affected, is a part of the navigation power the exercise of which cannot call for compensation.

Whereupon this respondent excepted to such disapproval and refusal.

XV.

If the United States, acting under the law for this taking, diverts the water of a navigable river into a channel other than the natural channel and in such artificial channel there is a fall in the flow of the water corresponding to the fall in the flow in the natural channel on the land of the riparian and the United States avails, or may avail, itself of the power of such fall for profit, in such artificial channel, compensation is due to the riparian. Such compensation should be adjusted on the basis of the value of the use to the United
854 States of that power which is so taken from the natural channel and transferred to the artificial channel, not exceeding its fair value to the riparian for use in the natural channel.

Disapproved, understanding that the transfer to the artificial channel was directly in aid of navigation and not with the primary purpose of producing power.

Whereupon this respondent excepted to such disapproval and refusal.

XVI.

If in its operations in the interest of navigation at Sault Ste. Marie, under the act for this taking, the United States should build a dam on its own submerged land below the submerged land of the Chandler-Dunbar Water Power Company, and so drown out or obliterate the water power on the Chandler-Dunbar land, the power inherent in the fall of the water in its natural condition on the Chandler-Dunbar lands would be transferred to the dam in the rapids below, and would be in the control of the United States for revenue, and just compensation should be made for its value to the Chandler-Dunbar Company based on the value to the United States of the power so transferred not exceeding its fair value to the company for use on its lands.

Disapproved, understanding that the works specified were primarily in aid of navigation.

Whereupon this respondent excepted to such disapproval and refusal.

XVII.

If, in the improvement of navigation at the Sault Rapids, under the act for this taking, the water power of the Chandler-Dunbar Company should be transferred in any way from the submerged lands of that company and brought into condition where it, including the fall due to the lands of that company, might be used
855 for power by the United States, compensation would be due the Chandler-Dunbar Water Power Company, based upon the value of the use of its power by the United States, not, however, exceeding its value to such company for use by it as a riparian.

Disapproved. I intend this and the two previous rulings to be that a riparian proprietor on this particular water way and with its special, attendant conditions owns the usufruct of the flowing water subject to the contingency that it may be obliterated without compensation to him when such destruction is the incidental effect of works constructed in or along the same waterway with the primary purpose of aiding navigation, and that the fair possibility of such destruction, in whole or in part, must be considered in awarding compensation for a taking before such destruction has become imminent.

Whereupon this respondent excepted to such disapproval and refusal.

XVIII.

Presumably the Canadian courts would enforce the rights of American riparians against wrong doers on the Canadian side of the international boundary. Also presumably, the Federal courts would enforce the rights of Canadian riparians against wrong doers on the American side.

Approved; but it does not appear that an American riparian has, as such, any rights on the Canadian side of the boundary.

Whereupon this respondent excepted to such modification of approval.

856 XXIII. --

The Chandler-Dunbar Water Power Company is entitled, on account of its water power taken, amounting, on the basis that one-half of the flow of the river is appurtenant to the American shore, to 35,000 theoretical horse power, to just compensation therefor.

Which conclusion was rejected by the court, and to which rejection this respondent by its counsel duly excepted.

XXIV.

The Chandler-Dunbar Water Power Company is entitled to the value of the use on a nine foot head of the volume of water planned to be used for water power purposes by the United States in the bed of the stream.

Which conclusion was rejected by the court, and to which rejection this respondent by its counsel duly excepted.

XXV.

In addition to the item named in conclusion XX, the Chandler-Dunbar Water Power Company is entitled to the value of the use of the volume of water planned to be used for water-power purposes through the Michigan-Lake Superior Power Company's canal, and which such canal has capacity to divert and use, and which amount respondent claims to be 20,000 cubic feet per second.

Which conclusion was rejected by the court, and to which
857 rejection this respondent by its counsel duly excepted.

A. B. ELDRIDGE,
Atty. for Respondent, Chandler-Dunbar Water Power Co.

MOSES HOOPER,
J. H. GOFF,
Attorneys for Respondent.

(Endorsed:) No. 638. U. S. Circuit Court, Westn. Dist. Mich. Northn. Divn. United States vs. Chandler-Dunbar Water Power Company. Exceptions to disapproval of conclusions. Filed Dec. 28, 1911. Chas. L. Fitch, clerk. A. B. Eldredge, atty. for respondent, Chandler-Dunbar Water Power Co.

858 *Exceptions by Chandler-Dunbar Company to refusal to find facts requested by it.*

859 In the Circuit Court of the United States for the Western District of Michigan, Northern Division.

UNITED STATES, PETITIONER, *vs.* CHANDLER-DUNBAR WATER POWER COMPANY, IMPLEADED with others, respondent.	No. 638.

And now comes the respondent, the Chandler-Dunbar Water Power Company, and excepts to the refusal of the court to find facts requested by it as follows:

I.

The Chandler-Dunbar Water Power Company was, at the time of the taking thereof by the United States, through the Secretary of War, in 1909, and except for such taking is now, the owner of so much

of Portage Street as is included in said petition under the designation of "Second description" and "Third description," together with the riparian rights appurtenant thereto, containing 1.326 acres, more or less.

The court refused to find the fact as so requested, and thereupon said respondent duly excepted to such refusal by its counsel.

II.

The patent to William Chandler of the part of so-called Indian reserve involved in this case describes the land as bounded by the
"St. Marys Falls Canal and Portage Street extended on the
860 south." The patent of village lot three grants the lot with others "according to the official plat of the survey of said lands returned to the General Land Office by the surveyor general," and the field notes of said village lot three for one boundary thereof read "North 77 degrees 10 minutes west along the south side of Portage Street to right bank River St. Mary."

The court refused to find the fact as so requested, and thereupon said respondent duly except to such refusal by its counsel.

III.

The same (the Michigan Lake Superior Power Company's canal) is built for water-power purposes and the capacity of the same is to take and use for power fully 20,000 c. s. f.

The court refused to find the fact as so requested, and thereupon said respondent duly excepted to such refusal by its counsel.

IV.

Remedial works in the channel of the river sufficient to compensate for the withdrawal of that amount (20,000 c. s. f) of water from the river might be constructed at comparatively inconsiderable expense. Same would probably be (almost necessarily be) part of any remedial works to control the outflow of Lake Superior.

The court refused to find the fact as so requested, and thereupon said respondent duly excepted to such refusal by its counsel.

861 V.

The plans proposed by the Chandler-Dunbar Water Power Company for the development and control of the water power sufficiently provide for the passage of ice through the same.

The court refused to find the fact as so requested, and thereupon said respondent duly excepted to such refusal by its counsel.

VI.

The Chandler-Dunbar Water Power Company, after the development of power, as shown by Finding XXXIV, formulated a plan for a very much larger development, which plan involved the build-

ing of a cross dam to extend further into the stream and to take in about 9,777 c. s. f. of the flow, the additional power to be used by the American Sault Paper Company to operate a paper and pulp mill. This plan was partially carried out, to the extent of making several contracts, but did not extend to the doing of any actual work in excavation or construction in the bed of the stream.

The court refused to find the fact as so requested, and thereupon said respondent duly excepted to such refusal by its counsel.

VII.

Both the United States and the Dominion of Canada desire the construction of controlling works in the St. Marys River, in order to control the outflow from Lake Superior in the interest of navigation.

The court refused to find the fact as so requested, and
862 thereupon said respondent duly excepted to such refusal by its counsel.

VIII.

Under conditions existing at the place of taking at the time of the taking, and considering present methods of navigation, it seems probably quite certain that a very large ratio of the water power at the Sault might be made available without any interference with or diminution of facility for navigation by mutually advantageous business combination and concession between the parties interested in the navigation and the power.

The court refused to find excepting as covered by Findings XX and XLI the fact as so requested, and thereupon this respondent duly excepted to such refusal by its counsel.

IX.

The proper measure to be taken herein as the flow of the River St. Marys at the Falls if 75,000 cubic feet per second.

The court refused to find the fact as so requested, and thereupon said respondent duly excepted to such refusal by its counsel.

J. H. GOFF,
Atty. for Chandler-Dunbar Water Power Co.

MOSES HOOPER,
Of Counsel.

863 (Endorsed:) U. S. Circuit Court, Westn. Dist. Mich., Northn. Divn. United States vs. Chandler-Dunbar Water Power Company. Exceptions to refusal to find facts. Filed Dec. 28, 1911. Chas. L. Fitch, clerk. J. H. Goff, atty. for Chandler-Dunbar Water Power Co.

864 *Exceptions of Chandler-Dunbar Water Power Company to ruling of court on petitioner's request on conclusions of law.*

865 In the Circuit Court of the United States for the Western District of Michigan, Northern Division.

UNITED STATES, PETITIONER,
vs.
CHANDLER-DUNBAR WATER POWER COMPANY, IMPLEADED with others, respondents. } No. 638.

Now comes the respondent, the Chandler-Dunbar Water Power Company, and excepts to the rulings of the court respecting the requests of the petitioner for conclusions of law, and particularly it excepts to the qualified ruling respecting request No. 3, on account that the ruling should have been an unqualified disapproval of the same.

It excepts to the qualified ruling respecting request No. 5, on account that the ruling should have been an unqualified disapproval of the same.

It excepts to the qualified ruling respecting request No. 6, on account that the ruling should have been an unqualified disapproval of the same.

It excepts to the qualified ruling respecting request No. 8, on
866 account that the ruling should have been an unqualified disapproval of the same.

It excepts to the qualified ruling respecting request No. 10, on account that the ruling should have been an unqualified disapproval of the same.

It excepts to the qualified ruling respecting request No. 11, on account that the ruling should have been an unqualified disapproval of the same.

It excepts to the qualified ruling respecting request No. 12, on account that the ruling should have been an unqualified disapproval of the same.

It excepts to the qualified ruling respecting request No. 13, on account that the ruling should have been an unqualified disapproval of the same.

It excepts to the qualified ruling respecting request No. 14, on account that the ruling should have been an unqualified disapproval of the same.

It excepts to the qualified ruling respecting request No. 15, on account that the ruling should have been an unqualified disapproval of the same.

It excepts to the qualified ruling respecting request No. 16, on account that the ruling should have been an unqualified disapproval of the same.

It excepts to the ruling of the court in approval of request No. 17, on account that such is not the law.

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It excepts to the qualified ruling respecting request No. 18,
867 on account that the ruling should have been an unqualified disapproval of the same.

It excepts to the qualified ruling respecting request No. 21, on account that the ruling should have been an unqualified disapproval of the same.

It excepts to the ruling of the court in approval of request No. 22, on account that such is not the law.

It excepts to the qualified ruling respecting request No. 23, on account that the ruling should have been an unqualified disapproval of the same.

It excepts to the qualified ruling respecting request No. 24, on account that the ruling should have been an unqualified disapproval of the same.

It excepts to the qualified ruling respecting request No. 25, on account that the ruling should have been an unqualified disapproval of the same.

It excepts to the qualified ruling respecting request No. 26, on account that the ruling should have been an unqualified disapproval of the same.

It excepts to the qualified ruling respecting request No. 27, on account that the ruling should have been an unqualified disapproval of the same.

It excepts to the qualified ruling respecting request No. 29, on account that the ruling should have been an unqualified disapproval of the same.

It excepts to the qualified ruling respecting request No. 30, on account that the ruling should have been an unqualified disapproval of the same.

868 It excepts to the qualified ruling respecting request No. 31, on account that the ruling should have been an unqualified disapproval of the same.

It excepts to the ruling of the court in approval of request No. 34, on account that such is not the law.

It excepts to the ruling of the court in approval of request No. 35, on account that such is not the law.

It excepts to the qualified ruling respecting request No. 38, on account that the ruling should have been an unqualified disapproval of the same.

It excepts to the qualified ruling respecting request No. 39, on account that the ruling should have been an unqualified disapproval of the same.

It excepts to the qualified ruling respecting request No. 41, on account that the ruling should have been an unqualified disapproval of the same.

It excepts to the qualified ruling respecting request No. 42, on account that the ruling should have been an unqualified disapproval of the same.

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It excepts to the qualified ruling respecting request No. 43, on account that the ruling should have been an unqualified disapproval of the same.

It excepts to the qualified ruling respecting request No. 44, on account that the ruling should have been an unqualified disapproval of the same.

J. H. GOFF,
Atty. for Chandler-Dunbar Water Power Co.
MOSES HOOPER, *of Counsel.*

869 (Endorsed:) No. 638. U. S. Circuit Court, Westn. Dist. Mich., Northern Divn. United States vs. Chandler-Dunbar Water Power Company and others. Exceptions to rulings. Filed Dec. 28, 1911. Chas. L. Fitch, clerk. J. H. Goff, atty. for Chandler-Dunbar Water Power Co.

870 UNITED STATES OF AMERICA.

In the District (formerly Circuit) Court of the United States of America for the Western District of Michigan, Northern Division.

UNITED STATES OF AMERICA, petitioner, *vs.* THE CHANDLER-DUNBAR WATER POWER Company, respondent, plaintiff in error, impleaded with the Edison Sault Electric Company, St. Marys Power Company, the Sault Ste. Marie Bridge Company, the City of Sault Ste. Marie, William Chandler, Harris T. Dunbar, the Standard Trust Company of New York, the Michigan Lake Superior Power Company (Charles D. Warren and Clarence M. Brown, as receivers of said company), Real Estate Trust Company of Philadelphia, the United States Mortgage and Trust Company, respondents.	No. 638. At law. Petition for writ of error.

In the matter of the condemnation of all lands and property of every kind and description north of the present Saint Marys Falls Ship Canal throughout its entire length and lying between said ship canal and the international boundary line at Sault Ste. Marie, in the State of Michigan.

Now comes the Chandler-Dunbar Water Power Company, respondent herein, and says:

That on or about the 29 day of December, A. D. 1911, the Circuit Court aforesaid, entered a judgment herein in favor of this respondent and against the petitioner, in which judgment and the proceed-

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ings had prior thereto in this case, certain errors were committed to the prejudice of this respondent, all of which will more in detail appear from the assignment of errors which is filed with this petition.

871 Wherefore, this respondent prays that a writ of error may issue in this behalf out of the Supreme Court of the United States for the correction of error so complained of, and that a transcript of the record, proceedings, and papers in this case, duly authenticated, may be sent to the Supreme Court of the United States.

JOHN H. GOFF,
Attorney for Respondent, the Chandler-Dunbar Water Power Company.

872

(Indorsed:) No. 638. United States of America. In the District (formerly Circuit) Court of the United States of America for the Western District of Michigan, Northern Division. United States of America, petitioner, vs. The Chandler-Dunbar Water Power Company, respondent, plaintiff in error, impleaded with the Edison Sault Electric Company et al. Petition for writ of error. Filed June 27, 1912. Fred J. Schultheis, dep. clerk. John H. Goff (Detroit, Mich.), attorney for the Chandler-Dunbar Water Power Company, respondent. Moses Hooper (Oshkosh, Wisconsin) and A. B. Eldredge (Marquette, Michigan), of counsel.

873 UNITED STATES OF AMERICA.

In the District (formerly Circuit) Court of the United States of America for the Western District of Michigan, Northern Division.

UNITED STATES OF AMERICA, PETITIONER, *vs.* THE CHANDLER-DUNBAR WATER POWER COMPANY, respondent, impleaded with the Edison Sault Electric Company, St. Marys Power Company, the Sault Ste. Marie Bridge Company, the City of Sault Ste. Marie, William Chandler, Harris T. Dunbar, the Standard Trust Company of New York, the Michigan Lake Superior Power Company (Charles D. Warren and Clarence M. Brown, as receivers of said company), Real Estate Trust Company of Philadelphia, the United States Mortgage and Trust Company, respondents.	No. 638. At law.

This 27th day of June, A. D. 1912, comes the respondent, the Chandler-Dunbar Water Power Company, by its attorney, and files herein and presents to the court its petition praying for the allowance of a writ of error, and an assignment of errors intended to be urged by it, praying also that a transcript of the record and pro-

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ceedings and papers upon which the judgment herein was rendered, duly authenticated, may be sent to the Supreme Court of the United States, and that such other and further proceedings may be had as are proper in the premises.

On consideration whereof the court does allow the writ of error upon the respondent's giving bond according to law in the sum of one thousand dollars.

CLARENCE W. SESSIONS,
District Judge.

874

(Indorsed:) No. 638. United States of America. In the District (formerly Circuit) Court of the United States of America for the Western District of Michigan, Northern Division. United States of America, petitioner, vs. The Chandler-Dunbar Water Power Company, respondent, impleaded with the Edison Sault Electric Company et al., respondents. Order allowing writ of error. Filed June 27, 1912. Fred J. Schultheis, dep. clerk. John H. Goff (Detroit, Mich.), attorney for the Chandler-Dunbar Water Power Company, respondent. Moses Hooper (Oshkosh, Wisconsin) and A. B. Eldredge (Marquette, Michigan), of counsel.

875 UNITED STATES OF AMERICA.

In the District (formerly Circuit) Court of the United States of America for the Western District of Michigan, Northern Division.

UNITED STATES OF AMERICA, PETITIONER,
vs.
THE CHANDLER-DUNBAR WATER POWER COMPANY, respondent, plaintiff in error, impleaded with the Edison Sault Electric Company, St. Marys Power Company, the Sault Ste. Marie Bridge Company, the City of Sault Ste. Marie, William Chandler, Harris T. Dunbar, the Standard Trust Company of New York, the Michigan Lake Superior Power Company (Charles D. Warren and Clarence M. Brown, as receivers of said company), Real Estate Trust Company of Philadelphia, the United States Mortgage and Trust Company, respondents.

In the matter of the condemnation of all lands and property of every kind and description north of the present Saint Marys Falls Ship Canal throughout its entire length and lying between said ship canal and the international boundary line at Sault Ste. Marie, in the State of Michigan.

To the clerk of the District Court of the United States for the Western District, Northern Division:

SIR: Please issue a writ of error in the above-entitled cause in behalf of the Chandler-Dunbar Water Power Co., respondent, im-

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pleaded with others, as plaintiff in error, and against the United States of America as defendant in error, according to Supreme Court rule No. 8, sub. 5. Let the return day be inside of 30 days from date of signing. It should be as near 30 days as convenient.

876 Draft of writ is herewith enclosed marked "Original."

I also enclose draft marked "Copy." Please make the copy to conform to the original and retain same in your office for the defendant in error.

July 6, 1912.

Yours, truly,

J. H. GOFF,

Atty. for Respondent, Chandler-Dunbar Water Power Co.

877

(Indorsed:) No. 638. United States of America. In the District (formerly Circuit) Court of the United States of America for the Western District of Michigan, Northern Division. United States of America, petitioner, vs. The Chandler-Dunbar Water Power Company, respondent, plaintiff in error, impleaded with the Edison Sault Electric Company et al. Præcipe for writ of error. Filed Jul. 8, 1912. Chas. L. Fitch, deputy clerk. John H. Goff, attorney for the Chandler-Dunbar Water Power Company, respondent. Moses Hooper and A. B. Eldredge, of counsel.

878 THE UNITED STATES OF AMERICA, *ss:*

The President of the United States of America, to the judge of the District Court of the United States for the Western District of Michigan, Northern Division, greeting:

Because in the records and proceedings, and also in the rendition of the judgment of a plea which is in the said district court, before you, between the United States of America, petitioner, and the Chandler-Dunbar Water Power Company, respondent, impleaded with the Edison Sault Electric Company, St. Marys Power Company, the Sault Ste. Marie Bridge Company, the City of Sault Ste. Marie, William Chandler, Harris T. Dunbar, the Standard Trust Company of New York, the Michigan Lake Superior Power Company (Charles D. Warren and Clarence M. Brown, as receivers of said company), Real Estate Trust Company of Philadelphia, the United States Mortgage and Trust Company, respondents, in the matter of the condemnation of all lands and property of every kind and description north of the present Saint Marys Falls Ship Canal throughout its entire length and lying between said ship canal and the international boundary line at Sault Ste. Marie, in the State of Michigan, a manifest error has happened, to the great damage of the said the Chandler-Dunbar Water Power Company, as by its complaint appears. We being willing that the error, if any has been, should be duly corrected and full and speedy justice done to the parties aforesaid in this behalf, do command you, if judgment be therein given, that under your seal, distinctly and openly, you send the record and proceedings aforesaid, with all things concerning the same, to the

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Supreme Court of the United States, together with this writ, so that you may have the same at the city of Washington on the seventh day of August next, in the said Supreme Court, to be then and there held, that the record and proceedings aforesaid being inspected, the said Supreme Court may cause further to be done to correct that error, what of right and according to the laws and customs of the United States should be done.

879 Witness the Honorable Edward D. White, Chief Justice of the United States, the eighth day of July, in the year of our Lord one thousand nine hundred and twelve, and of the Independence of the United States of America the one hundred and thirty-seventh.

[SEAL.] CHAS. J. POTTER,
Clerk of the District Court of the United States for the Western District of Michigan, Northern Division.

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(Indorsed:) Original. No. 638. United States of America. In the District (formerly Circuit) Court of the United States of America for the Western District of Michigan, Northern Division. United States of America, petitioner, vs. The Chandler-Dunbar Water Power Company, respondent, impleaded with the Edison Sault Eelectric Company et al., respondents. Writ of error. Filed Jul. 8, 1912. Chas. L. Fitch, deputy clerk. John H. Goff (Detroit, Mich.), attorney for the Chandler-Dunbar Water Power Company, respondent. Moses Hooper (Oshkosh, Wisconsin) and A. B. Eldredge (Marquette, Michigan), of counsel.

881 THE UNITED STATES OF AMERICA, *ss:*

The President of the United States of America to the judge of the District Court of the United States for the Western District of Michigan, Northern Division, greeting:

Because in the records and proceedings, and also in the rendition of the judgment of a plea which is in the said District Court, before you, between the United States of America, petitioner, and the Chandler-Dunbar Water Power Company, respondent, impleaded with the Edition Sault Electric Company, St. Marys Power Company, the Sault Ste. Marie Bridge Company, the City of Sault Ste. Marie, William Chandler, Harris T. Dunbar, the Standard Trust Company of New York, the Michigan Lake Superior Power Company (Charles D. Warren and Clarence M. Brown, as receivers of said company), Real Estate Trust Company of Philadelphia, the United States Mortgage and Trust Company, respondents, in the matter of the condemnation of all lands and property of every kind and description north of the present St. Marys Falls Ship Canal throughout its entire length and lying between said ship canal and the international boundary line at Sault Ste. Marie, in the State of Michigan, a manifest error has happened, to the great damage of the said The Chandler-Dunbar Water Power Company, as by its complaint appears. We being willing that the error, if any has been, should be duly corrected, and full and speedy justice done to the

parties aforesaid in this behalf, do command you, if judgment be therein given, that under your seal, distinctly and openly, you send the record and proceedings aforesaid, with all things concerning the same, to the Supreme Court of the United States, together with this writ, so that you may have the same at the city of Washington,
882 on the seventh day of August next, in the said Supreme Court, to be then and there held, that the record and proceedings aforesaid being inspected, the said Supreme Court may cause further to be done to correct that error, what of right, and according to the laws and customs of the United States, should be done.

Witness the Honorable Edward D. White, Chief Justice of the United States, the eighth day of July in the year of our Lord one thousand nine hundred and twelve, and of the Independence of the United States of America the one hundred and thirty-seventh.

[SEAL.] (Sd.) CHARLES J. POTTER,
Clerk of the District Court of the United States for the Western District of Michigan, Northern Division.

(Endorsed:) No. 638. United States of America. In the District (formerly Circuit) Court of the United States of America for the Western District of Michigan, Northern Division. United States of America, petitioner, vs. The Chandler-Dunbar Water Power Company, respondent, impleaded with the Edison Sault Electric Company et al., respondents. Copy of writ of error deposited for defendant in error July 8th, 1912. Chas. L. Fitch, deputy clerk. John H. Goff (Detroit, Michigan), attorney for the Chandler-Dunbar Water Power Company, respondent. Moses Hooper (Oshkosh, Wisconsin) and A. B. Eldredge (Marquette, Michigan), of counsel.

883 THE UNITED STATES OF AMERICA, *ss:*

To the United States of America, greeting:

You are hereby cited and admonished to be and appear at a Supreme Court of the United States to be holden at Washington within thirty days from the date hereof, pursuant to a writ of error filed in the clerk's office of the District Court for the Western District of Michigan, Northern Division, wherein the Chandler-Dunbar Water Power Company, respondent, is plaintiff in error, and was impleaded with the Edison Sault Electric Company, St. Marys Power Company, the Sault Ste. Marie Bridge Company, the City of Sault Ste. Marie, William Chandler, Harris T. Dunbar, the Standard Trust Company of New York, the Michigan Lake Superior Power Company (Charles D. Warren and Clarence M. Brown, as receivers of said company), Real Estate Trust Company of Philadelphia, the United States Mortgage and Trust Company, respondents, in the matter of the condemnation of all lands and property of every kind and description north of the present Saint Marys Falls Ship Canal throughout its entire length and lying between said ship canal and the international boundary line at Sault Ste. Marie, in the State of Michigan, and wherein you are defendant in error, to show cause, if

any there be, why the judgment and award rendered in favor of said plaintiff in error, as in the said writ of error mentioned, should not be corrected, and why speedy justice should not be done to the parties in that behalf.

Witness the Honorable Clarence W. Sessions, district judge for the western district of Michigan, this 8th day of July, A. D. 1912.

C. W. SESSIONS,
District Judge.

We hereby, this 10th day of July, A. D. 1912, accept due personal service of this citation on behalf of the United States of America.

R. T. STRICKLAND,
Special Asst. Atty. Gen.
F. C. WETMORE,
U. S. Atty.
GRANT FELLOWS and
WM. K. CHESTER,
Special Asst. U. S. Attys.

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(Indorsed:) Original. No. 638. United States of America. In the District (formerly Circuit) Court of the United States of America for the Western District of Michigan, Northern Division. United States of America, petitioner, vs. The Chandler-Dunbar Water Power Company respondent, plaintiff in error, impleaded with the Edison Sault Electric Company et al. Citation. Filed July 12, 1912. FRED J. SCHULTHEIS, Deputy Clerk. John H. Goff (Detroit, Mich.), attorney for the Chandler-Dunbar Water Power Company, respondent. Moses Hooper (Oskosh, Wisconsin) and A. B. Eldredge (Marquette, Michigan), of counsel.

885 UNITED STATES OF AMERICA.

In the District (formerly Circuit) Court of the United States of America for the Western District of Michigan, Northern Division.

UNITED STATES OF AMERICA, PETITIONER,
vs.
THE CHANDLER-DUNBAR WATER POWER COMPANY, RESPONDENT, plaintiff in error, impleaded with the Edison Sault Electric Company, St. Marys Power Company, the Sault Ste. Marie Bridge Company, the City of Sault Ste. Marie, William Chandler, Harris T. Dunbar, the Standard Trust Company of New York, the Michigan-Lake Superior Power Company (Charles D. Warren and Clarence M. Brown, as receivers of said company), Real Estate Trust Company of Philadelphia, the United States Mortgage and Trust Company, respondents.

In the matter of the condemnation of all lands and property of every kind and description north of the present Saint Marys Falls

Ship Canal throughout its entire length and lying between said ship canal and the international boundary line at Sault Ste. Marie, in the State of Michigan.

The Chandler-Dunbar Water Power Company, a respondent in this action, in connection with its petition for a writ of error, makes the following assignment of errors, which it avers occurred upon the trial of the cause, to wit:

The court erred as follows:

First. In holding that the title to the parcel of land lying north of the Government canal and between that and the international boundary, called Portage Street, was in the Government at the time of taking and that no title of interest had passed to the adjoining owners, and that the adjoining owners were entitled to no award
886 of compensation therefor whereby the award made for the upland, excepting claims 95 and 96, to wit, $65,000, was reduced. By this error the compensation justly due this respondent was unjustly reduced $3,375.

Second. In holding that this respondent was not entitled to the value of the power available by the use of the half of the volume of the flow of the St. Marys River appurtenant to the American shore, less not more than the volume, parcel thereof, possible to be required for navigation, on the head available on the respondent's submerged lands, being a volume of 30,000 cubic second-feet in flow upon an effective head of 9 feet, and which the undisputed evidence and the findings as well show to have been of the value of $3,518,181. By this error, in connection with the error assigned as "Fifth," the compensation justly due this respondent was unjustly reduced by said amount of $3,518,181, less the amount of $550,000, parcel thereof, allowed by the award herein under specification "for raw water power."

Third. In holding that this respondent was not entitled to any compensation on account of the value of the use of the volume of water which the United States has planned to divert or permit to be diverted for use for power into and through the power canal of the Michigan-Lake Superior Power Company, which volume was shown by the undisputed evidence to be a flow of at least 20,000 cubic feet per second, such volume of flow on the fall of 9 feet, due to the lands of the Chandler-Dunbar Water Power Company, is of the value of $2,045,454. By this error the compensation justly due this respondent was unjustly reduced by said amount of $2,045,454, parcel of the amount of $3,518,181, specified in second assignment of errors.

Fourth. In holding that this respondent was not entitled to the value of the power available by the use of the volume of the water which the United States has planned to impound by the works being constructed at time of trial in the bed of the river for power purposes which this respondent claims to be a flow of 7,500 cubic

887 feet per second to be used on a head of 9 feet and to have been of the value of $1,127,000. By this error the compensation justly due this respondent was unjustly reduced by said amount of $1,127,000, less the amount of $550,000, parcel thereof, allowed by the award herein under specification "for the raw water power."

Fifth. In holding that the "proper basis for capitalization is ten per cent" instead of five per cent, as claimed by respondent, by this error the compensation justly due this respondent for the amount of water power allowed to respondent under specification "for raw water power" was reduced to one-half of the amount which was justly its due for such amount of water power so allowed, and for which amount of power the award should have been $1,100,000.

Sixth. In holding that the act of Congress of March 3, 1909, involved in this proceeding and its legislative history do not evidence an intent to recognize the existence of and to pay for all the water power rights appurtenant to the lands described in the act, and that the act and the taking do not raise a necessary inference of law that compensation is due for all of such water power rights.

Seventh. The findings of fact do not support the judgment, on account that such findings show that a very much larger award should have been made to the Chandler-Dunbar Water Power Company on account of its property taken in these proceedings.

Wherefore, said respondent, The Chandler-Dunbar Water Power Company, prays that the award and judgment of said Circuit Court may be reversed and set aside, and that an award and judgment may be rendered herein in favor of the respondent and against the United States, for the amount of three million and seventy thousand four hundred and ninety-three dollars, with interest on two million five hundred and twenty thousand four hundred and ninety-three dollars thereof from and after January 1st, 1910.

JOHN H. GOFF,
Attorney for Respondent,
The Chandler-Dunbar Water Power Company.
MOSES HOOPER,
A. B. ELDREDGE,
Of counsel.

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(Indorsed:) Original. No. 638. United States of America. In the District (formerly Circuit) Court of the United States of America for the Western District of Michigan, Northern Division. United States of America, petitioner, *vs.* The Chandler-Dunbar Water Power Company, respondent, plaintiff in error, impleaded with the Edison Sault Electric Company et al. Assignment of errors. Filed June 27, 1912. Fred J. Schultheis, dep. clerk. John H. Goff (Detroit, Mich.), attorney for The Chandler-Dunbar Water Power Company, respondent. Moses Hooper (Oshkosh, Wisconsin) and A. B. Eldredge (Marquette, Michigan), of counsel.

889 UNITED STATES OF AMERICA.

In the District (formerly Circuit) Court of the United States of America for the Western District of Michigan, Northern Division.

UNITED STATES OF AMERICA, PETITIONER,
vs.
THE CHANDLER-DUNBAR WATER POWER COMPANY, RESPONDENT, plaintiff in error, impleaded with the Edison Sault Electric Company, St. Marys Power Company, the Sault Ste. Marie Bridge Company, the City of Sault Ste. Marie, William Chandler, Harris T. Dunbar, the Standard Trust Company of New York, the Michigan Lake Superior Power Company (Charles D. Warren and Clarence M. Brown as receivers of said company), Real Estate Trust Company of Philadelphia, the United States Mortgage and Trust Company, respondents.

In the matter of the condemnation of all lands and property of every kind and description north of the present Saint Marys Falls Ship Canal throughout its entire length and lying between said ship canal and the international boundary line at Sault Ste. Marie, in the State of Michigan.

EASTERN DISTRICT OF MICHIGAN, County of Wayne, *ss:*

JOHN H. GOFF, being duly sworn, says that on the 27th day of June, A. D. 1912, he caused to be mailed to William K. Clute, special assistant U. S. attorney, a copy of the assignment of errors on file herein of the Chandler-Dunbar Water Power Company, and under date of July 5, 1912, he received an acknowledgment of the receipt thereof, which is hereto attached.

JOHN H. GOFF.

Sworn to and subscribed before me this 23rd day of July, A. D. 1912.

JOHN P. ANTISDEL,
Notary Public in and for Wayne County, Mich.

My commission expires Dec. 19, 1914.

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DEPARTMENT OF JUSTICE,
OFFICE OF UNITED STATES ATTORNEY,
WESTERN DISTRICT OF MICHIGAN,
Grand Rapids, July 5, 1912.

JOHN H. GOFF, Esq.,
Union Trust Bldg., Detroit, Mich.

DEAR SIR: Replying to yours of June 27th. I received a copy of the assignments of error of the Chandler-Dunbar Water Power Company. I suggest that you send a copy of these to Mr. Strickland and Mr. Fellows.

On the first of July I presented our petition for a writ of error and it was allowed by Judge Sessions. Citation has also been issued and I expect to serve it on you and Butzel and Stevenson, Carpenter & Butzel next week. It seems that service of a citation by mail is thought not to be sufficient; it must be a personal service.

Yours, truly,

WM. K. CLUTE.

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(Indorsed:) No. 638. United States of America. In the District (formerly Circuit) Court of the United States of America for the Western District of Michigan, Northern Division. United States of America, petitioner, *vs.* the Chandler-Dunbar Water Power Company, respondent, impleaded with others. Proof of service of assignment of errors. Filed July 25, 1912. Fred J. Schulthers, dep. clerk. John H. Goff, atty. for respondent. Moses Hooper, A. B. Eldredge, of counsel.

892 STATE OF MICHIGAN,
Wayne County, ss:

JOHN GOFF, being duly sworn, deposes and says that on the 14th day of February, A. D. 1912, he served a copy of a proposed bill of exceptions and notice of which the annexed is a duplicate, on Stevenson, Carpenter & Butzel, and a copy thereof on Leo M. Butzel, by leaving the same in the office of Stevenson, Carpenter & Butzel, with Josephine Graveline, a clerk thereof, and that on the day and year aforesaid he severally served a copy of said proposed bill on Sherman T. Handy, attorney for the city of Sault Ste. Marie, and on William K. Clute, an attorney for petitioner, by mail, enclosed in an envelope, plainly addressed to said Sherman T. Handy, Sault Ste. Marie, Mich., and to William K. Clute, Grand Rapids, Michigan, with postage fully prepaid. And that on the 21st day of February, A. D. 1912, he served a copy of said proposed bill and notice on A. S. Weill, attorney for the Real Estate Trust Co. of Philadelphia, by mail, enclosed in an envelope, plainly addressed to said A. S. Weill, 1418 Land Title Building, Philadelphia, the receipt of which was acknowledged by letter bearing date February 29th, 1912.

That on the 7th day of March, A. D. 1912, he served a copy of said proposed bill and notice on Arthur Webster, attorney for Standard Trust Company, by delivering the same to him personally.

That by letter bearing date February 15th, 1912, Messrs. Kleinhans & Knappen, notified deponent that they did not care for a copy or notice of settlement of bill of exceptions in this case.

JOHN H. GOFF.

Subscribed and sworn to before me this 23rd day of April, A. D. 1912.

JOHN P. ANTISDEL,
Notary Public, Wayne County, Michigan.

My commission expires Dec. 19, 1914.

893 In District (formerly Circuit) Court of the United States for the Western District of Michigan, Northern Division.

UNITED STATES, PETITIONER,
vs.
CHANDLER-DUNBAR WATER POWER COMPANY, IMPLEADED with the city of Sault Ste. Marie, the Michigan-Lake Superior Power Company, Charles M. Brown and Charles D. Warren, as receivers of the Michigan-Lake Superior Power Company, the Real Estate Trust Company of Philadelphia, the United States Mortgage and Trust Company of New York, and others, respondents.

Bill of exceptions of Chandler-Dunbar Water Power Co.

At a session of the Circuit Court of the United States for the Western District of Michigan, Northern Division, commenced at the court house of said court at the city of Marquette, on the 21st day of February, 1911, and continuing at the city of Grand Rapids up to and including the 30th of December, 1911.

Present, Honorable Arthur C. Denison, district judge.

Appeared as well the petitioner, the United States, by Wm. K. Clute and Grant Fellows, special assistants to the district attorney of the United States, and also by Fred C. Wetmore, United States district attorney for the Western District of Michigan, and R. T. Strickland, Assistant Attorney General, and as well, the Chandler-Dunbar Water Power Company, respondent defendant, by Arch B. Eldredge and John H. Goff, its attorneys, and Moses Hooper, its counsel, and other defendants and respondents by other their attorneys and counsel. And the St. Marys Power Company and the Michigan-Lake Superior Power Company, defendants respondents, by Leo M. Butzel, their attorney, and the city of Sault Ste. Marie, Michigan, by Sherman T. Handy, its attorney.

And thereupon, to maintain the issue on its part, the United States produced and offered in evidence Exhibit 1, being certified copy of field notes of the Whelpley survey of the private claims and village lot 3 and public grants at Sault Ste. Marie (p. 64). Among such notes was the following referring to the north boundary of village lot 3, to wit:

"Thence north 77 degrees 10 minutes west along the south side of Portage Street to the right bank River St. Mary" (p. 360).

The petitioner also produced one large map for purpose of showing the general location of the premises (p. 130). This was substantially same as respondent's Exhibit 24, produced by its witness Prof. Williams, and both of which maps are deposited with the clerk of this court and are hereby referred to and made part of this bill of exceptions.

Respecting the said map produced by the petitioner, FRITZ LEESEMAN testified: "The different points of interest are correctly located

and represented on this map. For instance, the power house of the Union Carbide Company, the Michigan-Lake Superior Power Canal, the old original State Canal, the Weitzel Lock, the lock now under construction, the location of these islands, the sunken dams of cribs above the entrance to the head-race, the compensating works on the Canadian side just west of the international bridge (p. 131), and the possible fourth lock" (p. 137).

Petitioner also introduced in evidence Exhibit 30, being copy of bill of complaint in the equity suit Chandler-Dunbar Water Power Company vs. Michigan-Lake Superior Power Company (p. 141).

The action by this respondent Chandler-Dunbar Water Power Company was commenced by bill in equity to restrain the Michigan-Lake Superior Power Company from diverting from the River St. Mary through its hydraulic canal the water appurtenant to the lands of this respondent. The part of the bill of complaint material herein is as follows:

"Such canal, so far as built, is of a width and depth to give a cross section below the water line of about 4,500 feet, and is of a size and capacity to carry about one-half of the whole flow of the St. Marys River at the ordinary low water stage thereof at said point,
894 to wit, about 1,800,000 cubic feet of water per minute with flow at the velocity calculated for its flow in said canal by the defendant. Only about one-tenth of the work necessary to the digging and completion of said canal remains to be done. The said defendant threatens to, and gives out that it will, and as your orator verily believes, unless restrained by this court, will complete said canal at such capacity and will divert that part of the water of the St. Marys River appurtenant to the south shore thereof and to the lands of your orator upon said south shore through said canal from said river at a point above your orator's said land and carry same around your orator's said land, and return the same to said river at a point below your orator's said land.

"Such diversion will render valueless the present hydraulic works of your orator, and such hydraulic works as your orator may build and construct in addition thereto for the further use of the waters of said river appurtenant to the lands of your orator; and will cause great and irreparable damage to your orator by destroying the value of the said present hydraulic works, and by withdrawing from the lands of your orator the remainder of the flow of the waters of said river appurtenant to said lands." (Rec., 579–80.)

Petitioner also introduced in evidence the answer to said bill of complaint and the reply of Chandler-Dunbar Water Power Company thereto. The part of such reply material herein is as follows:

"Answering subdivision e of Paragraph XVII of said answer, complainant admits that it has not threatened lawsuits against the defendant, nor opposed the construction of its canal, for the reason that, as the fact is, it was advised by the defendant's officers, before any active operations of any kind had been commenced, and as early as 1895, that the said canal would not in any manner interfere with the

property or rights of this complainant; that for more than three years prior to the time when the said Clergue and his associates purchased the assets of the St. Marys Falls Water Power Company, the complainant had been actively and openly engaged in developing water power on its land and in selling power in the city of Sault Ste. Marie. In 1897 complainant had plans and specifications prepared to develop, in connection with its lands, 35,000 horse-power, the development of which would require the use of half of the flow of the river at ordinary stages; and the preparation of these plans was then brought to the knowledge of the officers and agents of the defendant company and of the Lake Superior Power Company, and was well known by them.

"Early in 1898, and before work was commenced by the defendant upon its canal, complainant was advised by the engineer of defendant that the waters which defendant proposed to use in its canal were the waters appurtenant to the Canadian shore. Complainant therefore denies that by any act or omission of complainant or its officers the defendant was led to believe that the complainant either would consent, or would not object, to the diversion of the waters appurtenant to its lands into the said canal of the defendant.

"Again, in the fall of 1898, and before the defendant had expended any considerable amount of money on or made any considerable progress in work on its canal, a hearing respecting the same was had before a commission appointed by the Secretary of War, to which commission the defendant presented its plans respecting its canal, and to which commission the complainant presented its plans respecting the improvement of its property, from which it plainly appeared that the complainant claimed as its right that there should flow against its property and into its works there constructed, or to be constructed by it, all that part of the flow of the St. Marys River appurtenant to the American shore, of which plans and of which claim the defendant then had full and specific notice. It further appeared by the presentation of its plans that the water which the defendant intended to carry through its canal was the water appurtenant to the Canadian shore."

Reply was verified and served in October, 1902.

Petitioner offered in evidence notice of revocation of permits to the Edison Sault Electric Company and to the Chandler-Dunbar Water Power Company, which permits declared that they were "revocable at the pleasure of the Secretary of War." (The revocations to take effect on the first day of January, 1911.) It was conceded on the part of the counsel for the petitioner that these revocations were not in effect at the time of the trial, but that when they did take effect "the revocations will date back to January 1, as I understand it" (p. 156).

Mr. CLUTE, of counsel for the petitioner, stated:

"These revocations would refer to the permits that are now offered, or a portion of them.

We also offer the permits that were issued to the . We will call them the Clergue enterprises and the Chandler enterprises. There were two classes, one related to operations in the rapids; the other related to operations in the power canal" (p. 157).

The petitioner produced as a witness L. C. SABIN, who testified that his home was at Sault Ste. Marie, Michigan, where he had lived about fifteen years. That he was a civil engineer in the employ of the United States. Educated at the Michigan University, and employed by the Government about twenty-one years. At present assistant engineer at the Sault in charge of the improvement. His attention was called to the large map, petitioners' Exhibit 1, respecting which he said:

"The green represents the extension of Portage Avenue from the canal lands towards the northwest over to the meander line" (p. 164).

"The Michigan-Lake Superior Power Company's Canal is
895 indicated here by name running through the village of Sault Ste. Marie and discharging here, and the black mark at the end of that marked 'Power House' is their power house. Next to it is the plant occupied by the Union Carbide Company" (p. 165).

This is the head race of the present Edison Sault development.

"Starting just about at the bridge it passes through the first two spans, running easterly, finally coming to their new power house. * * *

"Their present tail-race is below the power house emptying into the rapids just" below Island No. 5 (p. 165).

"Q. There are some marks just west of the international bridge there. State to the court what those are: I refer to the * * * submerged lands.

"A. I am not personally familiar with the history of those, but I have understood they were what may be called ice piers. Cribs were sunk and capped over and they intercepted a portion of the water and a portion of the ice; the object of them being to shunt the ice away from the head race. * * * They were built by the Chandler-Dunbar Company."

And the place is marked "main dock" and "canal widening." It is spoil from the widening of the canal.

"Here are the compensating works all on the Canadian side, as I understand it.

"The COURT. What does that mean, 'compensating works'?

"A. To compensate for the amount of water that is taken by some canal not heretofore existing to hold back as much water as would be taken by some canal for water power purposes.

"Q. Those compensating works, one of these permits will have reference to that?

"A. I think not, Mr. Fellows.

"Q. I will ask you whether the compensating works were erected in consideration of the permit. Do you remember whether that was in the permit?

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"A. There was in the permit a statement that the level of Lake Superior must be held at a certain elevation, and that certain works, which should be subject to the approval of United States officers, were to be built to accomplish that result. I don't anticipate that any permit for these works has been revoked, for the reason that they were * * * understood to have been built on Canadian soil" (pp. 166–7–8).

"Q. I see you have marked on there a proposed fourth lock.

"A. A possible fourth lock; that is simply a tentative delineation of probably what would be recommended in case a fourth lock were authorized" (p. 169).

"Q. Now, I call your attention to some permits with reference to the other enterprises there, to the Clergue, called the Clergue enterprises, July the 31st, 1900, permit to dredge 18 feet deep in river east of locks?

"A. That is for dredging in the vicinity of this power house, at the lower end of the Michigan-Lake Superior Power Company's Canal. That is a permit similar to those granted to people desiring to put up docks anywhere on the river."

"Q. The next one is December the 12th, 1902, permit to divert water from river into canal under act of July the 30th, 1902. This was one of the Clergue enterprises?

"A. This was permit to divert water from the river into the Michigan-Lake Superior part of the canal under act of June 13th, 1902" (177–8).

"In my judgment the value of the new power house and such dockage as there is there, the old power house and such houses as there are and the railway dockage at the time the Government took possession, including the embankment forming the head race and the new power plant, the dock and the railroad siding would be of the value of one hundred seventy-five to two hundred thousand dollars" (p. 181).

On cross examination:

"These permits or licenses 'all declared that they were revocable at the pleasure of the Secretary of War'" (p. 185).

"I don't know whether if a man objected to having it in that form whether he could get it in any other or not. * * * No test was made of that question to my knowledge" (p. 186).

"My valuation of $175,000 to $200,000 included other things besides the power house. It included the embankment going up the river and the dock and the railroad siding and everything that is on the property in front of the lands claimed by the Chandler-Dunbar Company" (p. 186).

"I took account to some extent of the mason work but did not measure it. I took account of the cost of excavation of the head race. I don't remember how many cords I calculated. I made the calculation before the declaration of the taking by the Secretary of War. It was made in connection with the taking of the lands required for the new lock and canal under a previous act under which they were con-

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sidering the value of the property. I did not include an estimate of the tail-race, as that was on Government property, and this estimate was gotten up for the purpose of determining what improvements had been made on lands which the United States was considering buying" (pp. 186–7–8).

Here petitioner rested its case and this respondent, the Chandler-Dunbar Water Power Company, to maintain the issue on its part, offered in evidence those parts of the report of the International Waterways Commission on regulation of Lake Erie, published in 1910, being paragraph 42 on page 22, which paragraph is as follows:

896 "Attention is invited also to a discussion of the use of Lake Superior as a reservoir, which has been proposed by persons not familiar with the Great Lakes, to compensate for the diversion of water through the Chicago Drainage Canal. The result of the discussion is to show: 1, that Lake Superior, being naturally one of the greatest and best regulators of flow to be found in the world, maintains a flow in the St. Marys River, its outlet, which is remarkably uniform; 2, that uniformity of flow in that river is essential to the best interests of navigation of the river itself; 3, that during the winter months, when navigation is suspended, this uniformity of flow is still necessary to maintain the level of Lake Huron and keep it in condition to maintain in its turn the St. Clair and Detroit Rivers in the spring when navigation opens. It is not in the power of man to improve this uniformity of flow to any important degree. He may disturb it, making it less uniform, by storing water in Lake Superior, but any water withheld at one season would create a deficiency in the lake below, which must be replaced by an equivalent increase of discharge from Lake Superior at another season. This would simply increase the oscillations in the level of the lakes below; that is, would injure them without compensating in any degree for the diversion of water through the Chicago Drainage Canal" (pp. 203–4).

Said respondent also offered in evidence from the same report, pages 162 and 163, being tables 38 and 39, which are hereby referred to and made a part of the bill of exceptions herein.

Said respondent also offered in evidence from "Progress report of the International Waterways Commission," page 7, paragraph 15, and specifically this:

"The quantity of water consumed in the operation of the canals during the eight months of navigation is about 1,200 cubic feet per second. The quantity required in the future will be greater. Not less than four thousand cubic feet should be unconditionally reserved for canal uses, and in granting power privileges the respective Governments should not forfeit the right to increase the amount indefinitely. It may be remarked in passing that raft navigation over the rapids has so greatly diminished and is now so small in amount that the quantities of water above mentioned will suffice to provide for it. This leaves about sixty thousand cubic feet which may be temporarily used for power purposes" (pp. 204–5).

Said respondent also offered in evidence from "Report upon the conditions existing at Sault Ste. Marie, with rules for the control of the same recommended by the International Waterways Commission," dated May 3, 1906. From page 9, last clause:

"The interests constructing these works claim the right to do so, not only under the permits granted, but so far as the occupation of the bed of the rapids opposite the Chandler lands is concerned, by virtue of asserted riparian rights appurtenant to the ownership of the adjacent shore. In a litigation now pending, brought by the United States against the Chandler-Dunbar Water Power Company, in the Western District of Michigan, the district court has decided that the ownership of the shore lands carries with it the title to the bed of the river, including Islands No. 1 and 2, and from this it follows that the right to erect structures in the river to utilize the waters of the river for power purposes as it flows past the riparian owner's land, exists, subject merely to the restriction that the structures must not, directly or indirectly, injuriously affect navigation" (p. 205).

Said respondent further offered in evidence from the statement of the managers on the part of the House relative to the act of Congress passed in 1907, which is attached to the conference report relative to the river and harbor appropriation bill, the following:

"Aside from items of appropriation, the two main differences between the House and the Senate were in the provision for the acquisition of necessary land for the construction of a canal in St. Marys River, Michigan. Upon this an agreement has been reached which is set forth in the conference report. The Senate provision sought to authorize the acquisition of all land and waters between the existing canal in St. Marys River and the international boundary line. The question of the acquisition of this land is much embarrassed by conflicting claims of title. The provision as agreed upon provides only for the acquisition of the land immediately needed for the new canal and lock appropriated for in this bill, but seeks to prevent the creation of rights which will hereafter embarrass the Government in case, as is probable, other canals and locks may be needed to meet the growing demands of traffic."

Also from the report of the chairman of the Committee on Rivers and Harbors to accompany H. R. 28, 243, 60th Congress, second session, the following:

"Section 11 and 12 provide for the acquisition of all private property in the St. Marys River, Michigan, between the present public works and the international boundary line. After full discussion and examination it is the opinion of the committee that the acquisition of all private rights in this stream are essential, in order that the United States may be in a position to utilize this stream for the purposes of navigation. The traffic here is of enormous volume. Additional locks and probably a forebay will be required, and the growth is so rapid that any obstacle in the form of private rights is entirely undesirable. As there is a water power in this stream, a part belonging to the United States and part to be acquired by the

condemnation of the private rights in question, the section provides that this water power may be conserved by the Government and used directly for its own purposes or leased by the Secretary of War." (Deft. Ex. 7) (p. 215).

897 Also rules and regulations adopted by the Secretary of War on December 12, 1902, relating to the permit to the Michigan-Lake Superior Power Company to withdraw water from the River St. Mary and which were assented to by that company and found in the annual report of the Secretary of War for the year 1905, at page 326, which are as follows:

"Paragraph 8. That said company in its arrangement and construction of remedial works shall leave a suitable channel and water flow for the passage of logs over and through St. Mary's Falls.

"9. That these limitations are in addition to the special limitations of the act of June 13, 1902, regarding riparian or other rights of any person or corporation and the remedies therefor" (32 Fed. Stat., p 361) (p. 216).

Respondent offered in evidence contract between the Sault Ste. Marie Bridge Company and William Chandler and Cata O. Chandler, his wife, dated 9th of December, 1890 (Ex. 9), of which the material part is as follows:

"The said Chandler gives and grants unto the company the right to construct and perpetually maintain the embankment aforesaid and its bridge across the St. Maries River, as well as to construct and perpetually maintain side tracks to his land as hereinafter mentioned.

"The said Chandler shall retain all riparian rights and privileges which were vested in him at the date of the said memorandum, subject, however, to the said right of the company to construct and maintain the said works as aforesaid, and he, his lessees, heirs, and assigns, shall also be entitled to make any canal, embankment, or other construction extending from his said land under any span of the said bridge, and of passing, repassing, and laboring thereunder, and of taking material upon and from the sand land under the said span, and of doing every other thing requisite and necessary for excavating, erecting, or maintaining any such canal or construction: Provided, that the same shall be such as will not injure the said bridge or its piers or abutments, or the said embankment, and as will not interfere with the use thereof by the company."

Then follows a release of damages, and paragraph 4 is as follows:

"When any mill or factory or other place of business shall be erected on said land by the said Chandler, his lessees, heirs, or assigns, the company shall on his or their written request construct a side track, and shall perform all the work and furnish all the material necessary therefor, extending from its main track upon the said embankment in manner following, that is to say: The company shall bear the expense of the construction of the said side track from its said main track to the land of the said Chandler, and shall also furnish at its own expense the rails necessary for the construction and maintenance of an extension of such side track upon and over the land of the said Chandler, to the said mill, factory, or other place

of business. The said Chandler shall bear the expense except for the rails aforesaid, of the construction of the said extension, of every such side track upon his land. The company shall thereafter at all times maintain and repair the said side track from its said main track to the land of the said Chandler, and the said Chandler shall thereafter at all times maintain and repair the said extension of the said side track upon his land, and shall allow the company, its successors and assigns, the free use of every such side track or extension as may be constructed on his land aforesaid, for all purposes connected with the business of such mill, factory, or other place of business, or of any other to which it may give access, and on demand will execute such further instrument (if any) as may be necessary to convey such free use: Provided, always, that all the railway companies which from time to time shall have the right to use the said bridge, shall have also the right to use the said side track or side tracks and extension or extensions, upon equal terms and in manner provided, and subject to the limitations and conditions, as far as applicable, for the general use of the said bridge specified in the act of Congress relating thereto, dated July 8th, 1882" (pp. 218, 219, 220).

Said respondent then introduced in evidence contract between the United States of America and the Sault Ste. Marie Bridge Company, dated 27th of September, 1910, being a contract which is a part of the transaction by which the bridge company conveyed to the United States all its interest in the property sought to be acquired by this proceeding. The object being to show that the Government itself reserves the right for substantially such a railroad upon the property which it is acquiring from the Chandler-Dunbar Water Power Company as the Candler-Dunbar Water Power Company had with the bridge company previously, marked "Ex. 10." The material parts of which are as follows:

"The bridge company shall, at its own expense, replace the fill in its present bridge structure with a bascule bridge directly over the new canal now being constructed by the United States; such bascule bridge shall allow a clear space over said canal of at least 318 feet.

"The United States shall fill the existing span in the bridge company's bridge next northerly of said bascule bridge from the water to the level of the ties on said span, and the bridge company shall be allowed to remove said span.

"3. The United States shall be allowed to construct an approach to the said fill from the level of the banks of its canal with an opening through the north end of said fill for side tracks. When the said approach and the road bed for said tracks have been prepared by the United States, the bridge company shall place thereon the
898 necessary ties and rails, properly ballasted, not exceeding three-quarters of a mile in all, and shall operate the same when desired by the United States at reasonable rates for the services rendered" (pp. 221-222).

Said respondent also offered in evidence House Document No. 358, 56th Congress, first session. This document is a letter from the

Secretary of War dated Jan. 29, 1900, transmitting to the House of Representatives a letter from the Chief of Engineers submitting papers relating to the proposed power canal of the Michigan-Lake Superior Power Company, which was on January 30, 1900, referred to the Committee on Rivers and Harbors and ordered to be printed.

Same contains letter from Lieut. Col. Lydecker, Corps of Engineers, to Gen. Wilson, Chief of Engineers, September 10, 1898, stating that it had come to his knowledge that a corporation therein misnamed but being the Michigan-Lake Superior Power Company had commenced work on constructing what is now the canal of said company. This letter said among other things—

"The normal low water discharge of the St. Marys River is, in round numbers, 60,000 cubic feet per second; and it is represented that the consumption of one-half this amount, or even more, is contemplated by the power company. The effect of cross currents generated in the navigable channel by the outflow and inpour of this large amount of water is an important consideration, as well as the effect on the regimen of Lake Superior." (Doc., p. 3.)

Same contains—

"Petition of the Michigan-Lake Superior Power Company of Sault Ste. Marie, Mich., for permission to make, within the limits of the St. Marys River, certain excavations and constructions designed as a part of a hydraulic canal in course of construction at Sault Ste. Marie, and to utilize water from said river for the purposes of said canal."

Said petition said among other things—

"Your petitioner further represents that the enterprise of constructing said canal and the appurtenant structures will occupy a period of about two years, and that, until the completion of the said work, water can not and will not be diverted from the St. Marys River.

"It is further represented that, in addition to the works heretofore referred to, your petitioner proposes, as an integral part of said undertaking, to erect in the bed of St. Marys River, between the intake and fore bay, and in a location where the interests of navigation will not be affected or inconvenienced, such structures as will be required to make proper compensation for the increased outflow of the St. Marys River which will be created by the diversion of the volume of water needed for this hydraulic development, and to preserve intact the present levels of Lake Superior and the St. Marys River." (Doc., p. 7.)

It also contains report of Board of Engineers, Col. Lydecker, Col. Raymond and Major Symons, to Gen. Wilson, Chief of Engineers, dated February 23, 1899, as follows:

"UNITED STATES ENGINEER OFFICE,
"*Detroit, Mich., February 23, 1899.*

"GENERAL: The Board of Engineers constituted by Special Orders, No. 28, Headquarters Corps of Engineers, United States Army, Oc-

tober 19, 1898, as amended by Special Orders, No. 6, January 18, 1899, to consider the project of the Michigan-Lake Superior Power Company, of Sault Ste. Marie, Mich., for the construction of a water-power canal, and to report as to the probable effect of the proposed canal upon the interests of commerce and navigation, has the honor to submit the following report:

"The Michigan-Lake Superior Power Company represents that it is duly incorporated under the laws of the State of Michigan, with charter powers (1) to construct and maintain, within the limits of the city of Sault Ste. Marie, Mich., a water-power canal from a point above to a point below the rapids of the St. Marys River, and to own, use and control the same for the purpose of supplying, upon an agreed rental, water power for manufacturing and other purposes, and (2) to divert into the canal, when constructed, waters from Lake Superior or the St. Marys River.

"The canal projected under this charter is designed and proportioned to divert and use a constant flow of water amounting in round numbers to 32,000 cubic feet per second, the exact amount, as computed by the company's chief engineer, being 31,521 cubic feet. It is freely admitted that the water levels of Lake Superior would be seriously affected if its natural discharge should be increased by anything approaching this amount, and the company therefore proposes to correspondingly reduce the natural discharge by erecting 'remedial works' in the St. Marys River at the head of the rapids, the specific project presented for this purpose being a submerged dam of stone-filled cribs, located on the Canadian side of the river.

"The blue print hereto attached shows the locations of the proposed canal and remedial works and also illustrates existing features or conditions which must be duly considered in this report, the principal ones being as follows:

"1. The American and Canadian ship canals, by which all commerce to and from Lake Superior must pass. The freight carried in this commerce during the navigable season of 1898, a period of eight months, was 21,234,664 tons, with a valuation of about $231,000,000. This is an increase of 2,251,909 tons and of about $12,750,000 over the corresponding amounts for the season of 1897.

"2. The Lake Superior Water Power Canal (in Canada) is a recent construction, which in its present condition furnishes the power
899 for operating a paper-pulp mill, located at its lower end, and also for generating electricity, which is conducted to and used for operating the company's calcium carbide works on the American side of the river. The amount of water now used is represented as being from 4,000 to 5,000 cubic feet per second, but the canal can easily be made of much greater capacity. This canal increases the natural discharge of Lake Superior by the amount of water that is taken through it.

"3. The natural channel north of Whitefish Island (Canadian side) has been adapted and used for water-power purposes by means of a dam erected at its outlet. This is not now in use for that pur-

pose, but the conditions appear to be such as to admit of extensive development without increasing the natural discharge from Lake Superior.

"4. The Chandler-Dunbar Water Power Company is the riparian owner on the American side of the rapids from their head for a distance of 3,000 feet down stream. It has made large expenditures for improvements and thereby established a water-power plant which is utilized for supplying electric light and power for local public and private purposes. The company asserts absolute legal right to the use of all water flowing over the rapids between the American shore and midstream, without diminution or alteration, except as required for the interests of navigation and commerce, and it represents that is proposes eventually to utilize all the flow to which it is entitled. Application for authority to proceed with work having this object in view has been made to the Secretary of War and has been referred to the local United States engineer for report. The proposed development does not contemplate any increase in the natural discharge from Lake Superior.

"5. Jurisdiction and control over the waters of Lake Superior and the St. Marys River vest in the United States and Canada, and in the matter now under consideration it is most important that the limiting line to which each holds jurisdiction through the rapids should be definitely known, but the board has been unable to find any authoritative or conclusive location of such line.

"6. The discharge of the St. Marys River has not been measured at stages corresponding to the high and low water stages of Lake Superior, but from measurements made at intermediate stages it has been deduced that the low-water discharge is about 60,000 cubic feet per second and the high-water discharge about 100,000 feet.

"After a full consideration of the existing features and situation as above outlined and more fully detailed in the memoranda herewith marked 'A,' and of all the papers, maps, and information which it has been able to obtain, the board has reached the following conclusions:

"The Chandler-Dunbar Water Power Company owns the land on the American side adjacent to the rapids of the St. Marys River, and claims to own and control the use of the water power of the river to the middle of the stream not needed for purposes of navigation. This ownership is asserted to be founded on common law and to be superior to any rights which can be conferred by State statute, such as that under which the Michigan-Lake Superior Power Company is operating. The ownership of the land on the Canadian side of the river, equally and for the same reason, is believed to carry with it the ownership of the water power of the river and falls to midstream.

"If these propositions are true, it is difficult to see where or how the Michigan-Lake Superior Power Company gets any rights to the water power of the river and falls, or how the company can carry out its plans without encroaching on the rights of others. It would seem as if this company should be required to quiet the claims of the own-

ers of the water power under the common law before it proceeds with its work of deflecting the waters of the river into its canal. Otherwise it is reasonable to expect that at some time it might become involved in litigation and possible bankruptcy, and the care and maintenance of its works to conserve the interests of navigation would fall upon the United States or upon Canada, or upon both countries. It would therefore appear that the interests of the United States and Canada demand that, in any case, before authority to proceed with its work be granted, the company should be required to satisfy the Government that it has a clear and unequivocal title to the water and the right to deflect the same. In this connection attention is respectfully invited to the statement of the Chandler-Dunbar Water Power Company, which is herewith marked 'B.'

"Furthermore, the board begs to state that it has examined the plans submitted by the Michigan-Lake Superior Power Company for the remedial structures required to guard the interests of navigation, and is unable to recommend them for approval for the reason that the works are designed to be located on the Canadian side of the river, in whole or in part, beyond the boundary line, as this is popularly understood to be, where they would be beyond the jurisdiction of the United States, and the power company has exhibited no authorization from the Canadian Government for their construction or maintenance. And, moreover, the board invites attention to the fact that the plan proposed for these remedial works is largely based upon theoretical assumptions not fully established by observations, and the board is not satisfied that it is the best plan that can be devised for the purpose in view.

"For the reasons above set forth, the board is unable to recommend the approval of the project submitted by this company.

"But other and more important considerations would prevent the board from recommending, under existing conditions, the au-
900 thorization of any project involving modifications of the rate or volume of the discharge through the present cross section of the free waterway at the head of St. Marys Falls. It is evident that such modifications of the discharge might produce changes in the level of Lake Superior which would seriously injure the navigation interests, not only of the United States, but also of Canada. The danger of such injuries is greatest in projects proposing diversions of a portion of the flow from the present channel into new ones, diversions which might be made either on the American or on the Canadian side of the falls with the consent of only one of the two Governments interested in the lake navigation. If any project modifying the volume or rate of discharge is authorized by either Government, it should be done under conditions satisfactory to the other, and the remedial works necessary to prevent injury to the interests of navigation should be designed, supervised, and controlled under regulations approved by both Governments.

"In view of the enormous commercial interests at stake, the board earnestly recommends that action be taken, through the proper diplo-

matic channels, for the formation of an international commission, composed of representatives of the United States and Canadian Governments, duly qualified to consider the intricate legal and engineering questions involved, to investigate the conditions governing the discharge of the waters of Lake Superior at St. Marys Falls and their relations to the lake levels, to formulate the conditions under which the waters discharged may be utilized for the development of power without serious danger of injury to the interests of navigation, to definitely establish the boundary line through the rapids of the St. Marys River, to determine an equitable division of the water-power privileges of these rapids between the two countries, and to recommend regulations for the guidance of both Governments in granting authority for the execution of projects involving changes in the rate or volume of flow and in providing for the construction, maintenance, and supervision of remedial works; this commission to report fully its conclusions and recommendations to both Governments for consideration and final action.

"The board is of the opinion that no project contemplating changes in the rate or volume of the flow through existing cross section at the head of St. Marys should be authorized by either Government until international regulations as above suggested have been established by both Governments. It accordingly recommends that the petition of the Michigan-Lake Superior Power Company be not granted.

"Respectfully submitted.

"C. J. LYDECKER,
"*Lieut. Col., Corps of Engineers.*
"C. W. RAYMOND,
"*Lieut. Col., Corps of Engineers.*
"T. W. SYMONS,
"*Major, Corps of Engineers.*

"Brig. Gen. JOHN M. WILSON,
"*Chief of Engineers, U. S. A.*"
(Doc. pp. 9, 10, 11, 12.)

Said letter was also accompanied by memoranda compiled by Lieut. Col. Lydecker for the use of the board, stating, among other things, the following:

"The condition of affairs now existing at the falls of the St. Marys River, briefly outlined, is as follows:

* * * * * * *

"(2) Adjoining the Canadian Ship Canal is a water-power canal recently constructed by the Lake Superior Power Company, the capacity of which is reported to be about 4,000 to 5,000 cubic feet per second in its present condition; but this capacity may be greatly increased.

"(3) The channel north of Whitefish Island (Canadian side) has been adapted and used for water-power purposes by damming the outlet. This is not now in service, but it is easily susceptible of an extensive development.

"(4) The Chandler-Dunbar Water Power Company is the riparian owner on the American side of the rapids from their head for a distance of about 3,000 feet downstream. As such riparian proprietor the company asserts title to the middle of the stream, and claims absolute legal right to its corresponding natural flow, without diminution or alterations, except as required for the interests of navigation or commerce. It has made large expenditures in improvements for developments, supplying the electric light and power required for local public and private purposes. The company represents that it proposes to make much more extensive developments in the near future and to eventually utilize all the natural flow to which its riparian ownership gives it legal right and title. Application for authority to proceed with this development has already been made to the Secretary of War.

"(5) The discharge of the St. Marys River has not yet been measured at stages corresponding to the high and low water stages of Lake Superior, but from measurements made at intermediate stages it has been deduced that the low-water discharge is about 60,000 cubic feet per second and the high-water discharge about 100,000 feet. The canal which the American Lake Superior Power Company proposed to build is designed to discharge about 32,000 cubic feet per second." (Doc., p. 15.)

901 Such memoranda concluded with general remarks, including the following:

"3. The canal is designed to divert more than one-half of the natural low-water discharge from Lake Superior, and it is proposed to diminish the flow through the natural channel, via the rapids, by the same amount. Can this be done without seriously conflicting with the rights of property fronting on the rapids? The act of the State of Michigan under which this water-power company is incorporated purports to give it the right 'to divert waters from Lake Superior or St. Marys River, * * * subject to the consent of the board of supervisors of the proper county in which said waters so diverted are situated.' But this can hardly be construed as authorizing the company to erect works in the bed of the river, remote from their own property, and thereby prevent a like amount of water from continuing to flow by, or over, another person's property without his consent.

"4. The St. Marys River being the boundary between the United States and the Dominion of Canada, it is presumed that each country has proportionate jurisdiction concerning the use and control of its waters. The uncertainty respecting the location of the territorial boundary line is referred to in paragraph 6 of the above memoranda; but does the location of this line determine the volume of water which each country would control for water-power purposes, or is each country entitled to an equal division of the total water-power flow independently of how that flow is divided by the territorial boundary line?" (Doc., pp. 15–16.)

Said letter was also accompanied by letter of Jos. Ripley, assistant engineer to Col. Lydecker, dated Oct. 4, 1898, stating among other things:

"It seems to me that a board of United States and Canadian engineers should be appointed to study and determine the structures necessary to maintain the present normal stage of Lake Superior. It is probable that a system of submerged weirs and movable dams will be necessary, and their probable location will be at the head of the rapids and possibly the main part of them on the Canadian side of the river. Also the question of the extent and character of development which will be permissible in the rapids should be decided at this time, otherwise the question of the partial development of the power in the rapids will be an ever-recurring one." (Doc., p. 21.)

Said respondent further offered in evidence order of Secretary of War, made the 12th day of December, 1902, and read into the record this part:

"Now, therefore, this is to certify that the Secretary of War hereby approves the said plans (relating to the Michigan-Lake Superior Power Company's plans) which are hereto attached, and hereby gives his consent to the diversion of water from the St. Marys River, as authorized by said act, subject to the acceptance by said company of the following conditions:" The first we will pass. "Second. That when the mean level of Lake Superior at the canal for any calendar month falls below 601.5 feet above mean tide at New York, according to the levels of the United States Lake Survey office, the flow through the canal shall be reduced; the amount of reduction increasing as the monthly mean level falls, until it reaches 601.0, when all flow shall be stopped until the monthly mean level again exceeds 601.0, all without claim against the United States or against any officer thereof.

"3. That in addition to the requirements of condition 2 (supra) all flow shall likewise be stopped without claim against the United States or against any officer thereof.

"Should the mean monthly level of the lake remain below 601.5 for a period of six consecutive calendar months, and shall not be resumed until the monthly mean level shall exceed 601.5.

"4. That when the monthly mean level rises above 603.0 the flow through the canal to the remedial works shall be increased to their maximum capacity and shall so continue until the monthly mean level shall be less than 603.0 without claim against the United States or against any officer thereof."

To the same point, from the report of the existing conditions at Sault Ste. Marie, by the International Waterways Commission, dated May 3rd, 1906, on page 17, paragraph 4. Recommendations:

"The level of St. Marys River above the rapids shall be maintained between the elevation 601.7 and 603.2 feet above mean tide at New York, according to the system of levels established by the United States Government in 1903, and defined by a bench mark on the coping of the Weitzel Lock, at Sault Ste. Marie, Michigan, the elevation

of which is 606.069. The approval of plans of work by the commission and the consent of the Secretary of War and minister of public works to construct works or to use or divert water shall in no way relieve the owners and persons operating such works from the duty of maintaining said level" (pp. 224, 225, 226).

Said respondent then offered in evidence chapter 88 of the Laws of Ontario for the year 1889 (p. 310), the material parts of which are as follows:

"Chapter 88.

"An act respecting the Ontario and Sault Ste. Marie Water, Light and Power Company and the town of Sault Ste. Marie.

"Whereas the Sault Ste. Marie Water, Gas and Light Company have been incorporated * * * for the purpose of supplying the municipality of the town of Sault Ste. Marie with both water and light, and the counsel of the corporation of the town of Sault Ste. Marie have passed the several by-laws and entered into the several contracts and agreements * * * and whereas the said company alleges that it will materially assist them in carrying out their said contracts with the said municipality, and enable them to sup-
902 ply both water and light at much lower rates, if increased powers be granted to them to enable them to avail themselves of the water from the rapids of the St. Marys River for power and other purposes generally, as well as for water works, and water, and light purposes; and whereas * * *

"Therefore, Her Majesty, by and with the advice and consent of the Legislative Assembly of the Province of Ontario, enacts as follows:

"1. The name of the Sault Ste. Marie Water, Gas and Light Company is hereby changed to, and the said company shall be hereafter known and designated as, the Ontario and Sault Ste. Marie Water, Light and Power Company.

* * * * * * *

"4. After having acquired the land or property necessary for the carrying out of the works hereinafter mentioned, the company shall have the power to erect, construct, and maintain a dam or dams across the inland channels or rapids of the St. Marys River, or of any branch thereof within the Province of Ontario, and also to conduct water from the said river and the various branches thereof, and streams entering therein by canals or flumes to be made by the company at any place on the said rapids along the shores thereof for hydraulic purposes, and may also construct all necessary locks, piers, wharves, and other works on the canals, and may extend its works into, and take possession of the bed and beach of the said St. Marys River at the entrance of the canals or flumes, and for the foundations of the same in their entire length, and at any point at which it may be found expedient to provide an outlet or outlets for the waters of the canals or flumes, or tail-races for water-powers taken from the said canal or flumes; * * *

"7. The company may use, sell, lease, and otherwise dispose of the surplus water from the dams, flumes, raceways, or canals which it does not require, but which might be found useful and applicable to drive any machinery in mills, warehouses, and factories, and may purchase, acquire, hold, or possess lands along the sides of the flumes, dams, raceways, or canals on either or both sides thereof, and down to the river, and may sell, dispose of, or let and lease the said lands with or without water-power, on such terms and conditions as they may think fit."

Said respondent then offered in evidence chapter 119 of the Laws of Ontario for the year 1895 (p. 681), the material parts of which are as follows:

"Chapter 119.

"An act respecting the town of Sault Ste. Marie, the Ontario and Sault Ste. Marie Water, Light and Power Company, the Lake Superior Power Company, and the Tagona Water and Light Company.

* * * * * * *

"6. The name of the Ontario and Sault Ste. Marie Water, Light and Power Company is hereby changed to, and the said company shall hereafter be known and designated as, 'The Lake Superior Power Company,' and the said company shall have perpetual succession."

This respondent introduced in evidence respecting Portage Street the decision of the Commissioner of the General Land Office on the application of Wm. B. Cady to enter the part thereof herein involved:

On Dec. 6, 1901, Wm. B. Cady applied to enter the part of Portage Street, so-called, north of the canal and other parcels with Porterfield scrip. His application was rejected on May 15, 1902. Thereupon he made motion for a review of the decision by the Commissioner of the General Land Office, which motion to review was denied on August 13, 1903. In denying same, the commissioner said:

"By the decision of this office 'G' of May 15, 1902, the said applications were rejected, upon the grounds (1) that the tract above decribed as the extension of Portage Street, was, by the procedings under the act of September 26, 1850 (supra), dedicated by the United States to the village of Sault Ste. Marie for public uses as a street and such dedication divested the United States of all title to the land; that the land embraced in the street, as represented on said map, was not public land and not subject to location." (Rec., p. 573.)

* * * * * * *

"The applicant's contention on this point, briefly stated, is understood to be, that while the act of September 26, 1850 (supra), authorized the survey of the land into 'town lots, streets, avenues, public squares and out-lots,' and made provision for the disposal of the lots, it made no express dedication of the streets authorized to be laid out; that there would arise the implication of such dedication only where lots were laid out upon the street and disposed of, and to the use of

which lots the street would be necessary; that no such lots as provided for by the act were surveyed and sold, north of the St. Marys Canal reservation, and therefore that the use of Portage Street, north of said canal reservation, was not dedicated, but the fee as to it remains in the United States.

"In this the applicant appears to have been led into the error of fact. The 'Whelpley map,' and the records of this office show that, abutting upon the south side of this portion of Portage Street the land was laid off into: Lot No. 3, marked 'U. S. Vacant;' a part of claim No. 4, claimed by John P. Richardson, and a part of claim No. 5, claimed by Charles Bacon. The lot No. 3 was sold at public sale to Thomas R. Easterday, trustee, July 27th, 1874, certificate No. 2,
and was patented to him May 24, 1879. The claim No. 4 was
903 patented to John P. Richardson, April 10, 1882, and the claim
No. 5 was patented to Charles Bacon March 16, 1874. The land abutting upon the north side of that part of Portage Street, and lying between the street and the river, was represented on the 'Whelpley map' as 'Part of the Indian reservation.' But that entire tract was located by William Chandler with Porterfield scrip No. 123, May 17, 1881, and patent issued to him therefor December 15, 1883. Thus all the land on both sides of that part of Portage Street, and abutting upon it, has been disposed of in accordance with the survey, and with relation to the street, and the facts exist which the applicant admits would create a dedication by implication.

"But aside from this, the said act of September 26, 1850 (supra), authorized the survey of the land into 'town lots, streets, avenues, public squares, and out-lots,' and if there is in the language of the act no specific dedication of the streets, I am satisfied that the acceptance and approval of the plat of the survey and the passing of title to the subdivisions, as represented upon it, amounted to a dedication of all streets thereupon laid down to the public use, and was such an appropriation of the land as would bar the United States from otherwise disposing of it." (Rec., pp. 584–5.)

Respondent then produced as a witness WILLIAM CHANDLER, who testified as follows:

"Permits were all revocable at the pleasure of the Secretary of War (p. 270). But I looked the matter up, and I could not find that any had even been revoked, but I have found some now. I found in all my dealings with the department that it was that or nothing."

Said respondent offered in evidence letter February 22, 1906, relating to quitclaim to United States and railroad right of way and conduits for carrying electric current, being as follows:

"FEBRUARY 22ND, 1906.

"Mr. JOSEPH RIPLEY,
"*General Supt. and Engineer in Charge,*
"*St. Marys Falls Ship Canal,*
"*Sault Ste. Marie, Michigan.*

"DEAR SIR: I am in receipt of your communication of the 10th inst., in reply to mine of the 8th inst., together with the blue print, to which reference is made, in which you ask for a very large increase

in the amount of land deemed necessary for the possible Government requirements. Your previous request was for 5.372 acres, and you now want 8.75 acres.

"The blue print showing a study for the location of proposed locks, revetment piers, etc., indicate that your request may not be an unreasonable one; therefore the Chandler-Dunbar Water Power Company will make a conveyance of the tract described as containing 8.75 acres, more or less, to the United States, upon practically the same terms as outlined in my previous correspondence, excepting and reserving, of course, all the riparian rights outside of the lines of the lands conveyed.

"Upon the lands you desire is located our railroad siding track, connecting our works and proposed works with the main line of the Canadian Pacific Railroad. We should desire the United States to construct an embankment for a new siding to take the place of the one now there, and to remove the railroad siding to the new location made necessary by the change proposed. The new location of the track would of necessity be partly on the west of the present Canadian Pacific Railroad embankment, the making of which would require quite a fill. This, I understand, could be done quite advantageously for the refuse of the proposed canal excavation. We should desire that the exterior limits of this fill, where the depth of water is such as to require it, should be retained in position by cribwork. We would also desire the Government to extend our steel conduit for electric cables across the land conveyed, or such parts of it as the construction work of the Government would require, and put the same in condition for use.

"We would also desire to occupy the lands so granted, not immediately required by the Government under lease for nominal rent until such time as this company can get its works now under construction farther out in the river completed, and until the land is required for Government purposes, and also the right to remove any of our buildings from the same.

"I enclose you a deed covering the land you describe as necessary for canal purposes, properly executed by the Chandler-Dunbar Water Power Company conveying the same to the United States of America.

"Very respectfully,

"THE CHANDLER-DUNBAR WATER POWER CO.,

"By WM. CHANDLER, *President.*"

(Pp. 366, 367.)

Also letter as follows:

"UNITED STATES ENGINEER OFFICE.

"*Sault Ste. Marie, Michigan, April 24, 1907.*

"MR. WM. CHANDLER,

"*Prest. Chandler-Dunbar Water Power Co.,*

"*Sault Ste. Maria, Mich.*

"DEAR SIR: I have received your letter of April 17th, declining to return the quitclaim deed offered to the United States in February,

1906, on the ground that conditions have materially changed
904 since that time. Your offer, however, to submit a proposition by which the lands actually needed for the widening and improvement of the canal under present plans will be conveyed to the United States, is noted, and in accordance with your suggestion I enclose herewith a blue-print map showing such lands, the description of which by metes and bounds is as follows:

"All those certain pieces or parcels of land, situated in the city of Sault Ste. Marie, county of Chippewa and State of Michigan, forming parts of private land claims No. 95, No. 96, north part of claim No. 3, northeast part of claim No. 3, part of claim No. 4, and part of claim No. 5, village lot No. 3, and part of the Indian reservation, described as follows, to-wit:

"Beginning at the intersection of the north boundary line of the canal reservation with the principal meridian of Michigan, thence along said boundary line of canal reserve, as determined by the Whelpley survey of 1854–5, N. 85 degs. 23′ E. 2,449.26 feet (to the easterly boundary of the Chandler-Dunbar Water Power Company's lands), thence S. 89 degs. 40′ 21″ W. 1,821.50 feet, thence S. 85 degs. 23′ W. 557.1 feet, thence S. 89 degs. 40′ 21″ W. 601.91 feet, to the westerly boundary of claim No. 95, thence along westerly boundary line of said claim S. 45 degs. 13′ W. 95.14 feet, thence S. 74 degs. 54′ E. 276.54 feet, thence S. 87 degs. 16′ E. 207.9 feet, thence N. 85 degs. 23′ E. 130.68 feet to the place of beginning, containing 6.52 acres more or less.

"In connection with your proposition, will you also please submit such information as you may have regarding any incumbrances on the title to the land in question, which you have not been able to clear.

"Yours, very respectfully,

"(Sd.) L. C. SABIN,
"*Assistant Engineer.*"

1 enclosure.
(Pp. 369–370.)

Also letter as follows:

"The Chandler-Dunbar Water Power Co., Sault Ste. Marie, Mich. Wm. Chandler, pres.; H. T. Dunbar, vice pres.; S. G. Carlton, treas.; D. B. South, sec'y.

MAY 3RD, 1907.

"Mr. L. C. SABIN,
"*Assistant Engineer, Sault Ste. Marie, Michigan.*

"DEAR SIR: I beg to acknowledge the receipt of your letter of April 24th, 1907, with enclosure, asking for the submission of a proposition under which such lands as are now needed for the widening of the St. Marys Falls Ship Canal according to present plans would be conveyed to the Government.

"In reply I would say, that the lands described in your letter, and shown on the blue print accompanying the same, will be conveyed to the Government substantially in accordance with my communication

of February 22nd, 1906, which was accompanied by a deed which was not accepted. Conditions have, as you are aware, changed since the former deed was tendered and declined which render some changes in the conditions of acceptance of such conveyance desirable.

"I herewith enclose you a quitclaim deed for the nominal sum of one dollar, running to the United States, for the lands at present desired for canal widening for your consideration.

"Should the deed be accepted, I desire that the steel conduit running under the present canal, and conveying the transmission lines of the Edison Sault Electric Company, should be extended beyond the width of the widened canal to the south boundary of our land at the expense of the Government, and to use and make necessary repairs on the said conduit.

"The width of the land covered by the enclosed deed, as shown on the map, takes away our railroad siding and renders it impossible to bring down the siding upon our remaining lands. Therefore, I desire the Government shall provide the proper fill and grade or trestle for the shortening of the present curve, and transfer the present railway track and provide for carrying the same along the proposed north pier of the canal, upon the property conveyed, connecting with the tracks of the Edison Sault Electric Company, and of this company, near the lower end of the property; and that these companies be allowed to maintain and use the tracks in this position until such time as the construction of the proposed new canal to the north renders the land thus used necessary for canal construction, at which time the track may be removed. It is understood that the Government, for its own use, shall have joint use of the said track. The shortening of the curve, above noted, will prevent a railroad engine running over this siding. It would therefore be necessary to provide for the erection of a trolley line over the tracks and for the movement of the cars both to and from the main line with an electric trolley car. In the erection of the trolley line the Government shall erect the poles and the Chandler-Dunbar Water Power Company put on the trolley wire.

"Looking forward to the possibility of the Government in the near future acquiring lands for the construction of a new canal to the north of the present one, which would take all the main lands of this company not under water, I desire that the Government
905 should, with the material excavated from the lands conveyed by the accompanying deed, fill a tract of our submerged lands to the west of the international bridge and to the north of the line bounding the lands needed for the proposed new canal, that there may be some land to which may be removed our warehouse building and upon which a new railroad siding may be constructed. This fill should be constructed upon the river side with piers made of timbers or of selected stone, so that the action of the water would not wash down the slope of the shore and carry the material into our forebay. If the slope is made of stone, it should be of material that will stand at a slope of one to one. The approximate territory cov-

ered by this proposed fill is shown upon the blue print accompanying this letter.

"Regarding your request for information in reference to incumbrances on the title to the land, I would say that I believe we have a good title to all the land that the Chandler-Dunbar Water Power Company claims to own, although not a title that is unassailable. We only claim to own an individual one-half interest in that part of private land claim No. 3 lying north of the St. Marys Falls Ship Canal. There will be found a lis pendens on private land claims Nos. 95 and 96. The title to these tracts of land has been decided twice in our favor by the circuit court for the county of Marquette and once by the supreme court of the State. There possibly may be some questions regarding the title to a small interest in private land claim No. 4, lying north of the ship canal, and I believe the title is good. However, I would suggest that the United States district attorney, should the question of these titles be referred to him, confer with the attorney of the company, Mr. J. H. Goff, Union Trust Building, Detroit, who has gone into these titles exhaustively, and who, I am sure, will give all the information in his power. There is also a suit pending in the United States courts between the United States and the Chandler-Dunbar Water Power Company which reflects upon the title of the so-called Indian reservation. As this suit has already been decided by the United States District Court and the United States Circuit Court of Appeals in our favor, I cannot but think that the title is reasonably good to this portion of the land conveyed.

"Respectfully,

"CHANDLER-DUNBAR WATER POWER CO.,
"By WM. CHANDLER, *President*."

(Pp. 372, 373, 374.)

To this latter letter was attached a quitclaim deed from the Chandler-Dunbar Water Power Company to the United States, which deed was not accepted by the United States, and another deed was made to take its place, which deed the petitioner introduced in evidence. Same covered the land next south of the yellow strip on the large map (p. 375).

Thereupon WILLIAM CHANDLER was recalled and testified:

"The Attorney General objected to the deed attached to the letter owing to the fact that he was afraid that accepting the deed as it was first prepared might militate against the United States in its suit against the Chandler-Dunbar Water Power Company questioning the title of these lands, the mainland and the islands. The Attorney General then prepared a paragraph to insert in the deed which he deemed necessary to protect the interests of the Government, and that was accepted by us and a deed prepared in accordance therewith and substituted for this deed, which substituted deed was the deed introduced in evidence by the United States (430).

"There was no change in the terms upon which the United States accepted that deed" (p. 432).

Here a map, Exhibit 17, is shown the witness, showing the properties of the Chandler-Dunbar Water Power Company and the Edison Sault Electric Company and related constructions, and the witness testifies:

"The land north of the line dotted in black across the map is the land which the Government was to build for a railroad tract and warehouse site for the Chandler-Dunbar Water Power Company. The Chandler-Dunbar Water Power Company had correspondence with Gen. Davis, the predecessor of Col. Townsend in charge of the Government works at Sault Ste. Marie, with reference to this transaction, which resulted in the deed to the United States. I don't remember the date of the correspondence, but it was before May 3rd, six months or a year before."

Here this respondent offered in evidence a letter dated Jan. 2, 1908, Col. Chas. E. L. B. Davis to Wm. Livingston, which was as follows:

"WAR DEPARTMENT,
"UNITED STATES ENGINEER OFFICE,
"*Jones Building, Detroit, Mich., January 2, 1908.*

"Mr. WILLIAM LIVINGSTONE,
"*President of Lake Carriers' Association,*
"*Detroit, Mich.*

"SIR: In answer to your telephone inquiry of December 31st, 1907, as to the present status of the widening of the upper canal at Sault Ste. Marie, Mich., I have to say:

"1st. The river and harbor act of March 3, 1905, authorized the expenditure under continuing contract of $1,020,000.00 for widening the upper entrance to the present canal in accord-
906 ance with the project submitted in House Document No. 215, 58th Congress, 3rd session. Of this $1,020,000.00 there remains to be appropriated $250,000.00. This money was to be expended in rock and earth excavation, concrete revetment walls, timber, piers, filling, moveable dams, including head gates and superintendence and inspection, all in accordance with the project above mentioned.

"2nd. Negotiations for obtaining the land needed for the widening began at once, but as a suit was pending in the United States Circuit Court to quiet title to Islands Nos. 1 and 2, owned by the Chandler-Dunbar Water Power Company, the Department of Justice advised that no steps be taken to acquire the land until this suit was decided, so the season of 1905 was wasted. In November, 1905, I opened up the question of the land needed, and on March 5, 1906, I obtained a quitclaim deed for the nominal consideration of one dollar, and Mr. Chandler was notified March 21, 1906, that the War Department accepted the deed. The deed was returned August 8, 1906, with the opinion of the Acting Attorney General, who found various incumbrances. These incumbrances were purely technical, and much time

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and money were expended by the Chandler-Dunbar Company in the effort to remove them, but unsuccessfully, and another season's work was lost.

"Finally, a second quitclaim deed was prepared for the same nominal consideration and forwarded to Washington May 10, 1907, but was not acted upon by the Department of Justice until November 25, 1907, and then unfavorably, and the papers have only recently been received back by me. So a third season has passed and we are apparently no nearer a settlement of this question than we were at first, so far as the Department of Justice is concerned.

"In anticipation of a speedy decision in the matter—for it seemed to me it would be looking a gift horse in the mouth to raise technical points against a gift of very valuable property for which the Government might have been asked a large sum of money—I prepared specifications for the widening in May, 1906, and bids were opened July 24th of the same year. Six bids in all were received, ranging from $957,200 to $552,530. As the lowest figure was an exceedingly favorable one for the United States and within the estimates, I recommended its acceptance.

"August 3, 1906, the Engineer Department notified me that action on my recommendation would have to be deferred until the question of title was settled. The successful bidders were notified of this decision, and as no settlement was reached all bids were rejected September 24, 1906. In the meantime a good deal of work has been done, a cofferdam has been built around the portion of the work that can be done in the dry, the concrete abutments and foundations for the moveable dam—estimated to cost $400,000—have been completed as far as they can be before the erection of the steel swing bridge forming the dam proper, specifications for the steelwork prepared, and probably the bids for this work will be solicited in February next.

"3rd. The condition of the appropriation is in round numbers as follows:

On hand from previous appropriation	$308,000
Already appropriated	770,000
Yet to be appropriated	250,000
Total	$1,328,000
Expended up to date	179,360
Balance	$1,148,640

"You will therefore see that so far as this office and the Engineer Department are concerned every effort has been put forth to start this important public improvement.

"You are at liberty to publish this letter in full; in fact, I should prefer it rather than a brief summary.

"A copy of this letter has been sent to the Chief of Engineers.

"Very respectfully,

"CHARLES E. L. B. DAVIS,
"*Colonel, Corps of Engineers, U. S. A.*"

(Pp. 436-7-8-9.)

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Counsel stated: The purpose of this letter is to give a history of the deed leading up to the deed which was finally accepted by the United States, and it also may have a bearing on the construction of the act of Congress.

This respondent also introduced in evidence another letter from said company to Col. Davis, which is as follows:

"SAULT STE. MARIE, MICH., *Sept. 18, 1907.*

"Col. CHARLES E. L. B. DAVIS,
"*Corps of Engineers, U. S. Army,*
"*Detroit, Mich.*

"(Through L. C. Sabin, assistant engineer, Sault Ste. Marie, Mich.)

"SIR: We have your letter of July 23, 1907, wherein you request the Chandler-Dunbar Water Power Company to state on what terms it is willing to deed to the United States the land needed for new canal and new lock, viz, the land northward, toward the St. 907 Marys River, exclusive of the land already deeded for this widening, and including land which, as you intimate, will be required in the future for the construction of another lock.

"The Chandler-Dunbar Water Power Company and its predecessor in title have for twenty-five years been willing to give to the United States their main lands and so much of the adjoining subaqueous lands for navigation purposes as could be parted with while retaining the appurtenant water power and a suitable seat for the improvement and use of the same. During this time extensive and valuable improvements have been made on the lands now desired by the United States. In parting with these improvements, the United States will be asked to provide for the duplication of the same as near as may be farther out in the river, and otherwise compensate for such available improvements as can be duplicated; or, in other words, as nearly as possible under the new conditions now contemplated, to place us in as good a position as our legal rights and our equities entitled us to be at present.

"In consideration for the lands desired, which are very valuable to us for water power purposes on account of their riparian rights, authority will be asked to excavate tail-races in the St. Marys rapids below our property of sufficient capacity to carry water from any water power machinery we may install.

"Respectfully,

"THE CHANDLER-DUNBAR WATER POWER CO.,
"By WM. CHANDLER, *President.*"

(Pp. 439–40).

Here counsel for the petitioner produced plaintiff's Exhibit 55, which was a report of the engineers who were present as witnesses on both sides respecting some questions put to them for consideration.

It was agreed that the report, petitioner's Exhibit 55, be taken as evidence of the situation, the same as if some expert witness was

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called to the stand and testified that the things specified in this so-called report were according to his judgment facts. This report was as follows:

"*To the attorneys of the complainants and respondents, in re condemnation proceedings for St. Marys Falls Canal.*

"SIRS: Your committee of experts respectfully report the following agreement, as to physical conditions:

"1. The thread of the stream, as the thalweg, or line of the deepest channel, has been located from the international bridge eastward, from the soundings of the survey February, 1911, by Sherman Moore; from the bridge westward from the Macomb map of 1885 and from soundings of 1893 by the U. S. Engineer Office at Sault Ste. Marie. This thread of the stream has been delineated on the large map exhibited in the court room.

"2. By extending a line normal to the thread of the stream from a point at the intersection of the meander line with the north boundary of the U. S. canal lands, at the east extremity of the Chandler-Dunbar uplands, the easterly boundary of the submerged lands of the said company was located.

"3. (1) By a similar method the lines defining the east and west boundaries of submerged lands appurtenant to the Portage Street frontage were located.

"(2) By the method of division on the chord across the mouth of the bay in proportion to the meander frontages and the extension from the chord frontage of Portage Street of lines normal to the thread of the stream, an alternative location of the submerged lands appurtenant to Portage Street has been indicated.

"4. By a construction similar to that employed in defining the east boundary of the Chandler-Dunbar submerged lands, the west boundary of claims 95 and 96 was located.

"5. The fall of the St. Marys River within the limits of the Portage Street riparian boundaries amounts to one-thousandth of a foot for the first method of projection; and to three one-thousandths of a foot for the second method; as described in paragraph three.

"6. The committee agrees to accept as the best available data; from the report of the International Waterways Commission on the regulation of Lake Erie, 1910:

"(a) Table 19, page 101, as the volume of flow of the St. Marys River prior to 1908.

"(b) Table 3, page 86, as the elevation of the water surface of St. Marys River at the Southwest Pier above the locks prior to 1908.

"(c) Table 2, page 85, as the elevation of the water surface of Lake Superior prior to 1908.

"(d) Statement on page 81 that the rise of Lake Superior due to artificial changes in the St. Marys River in the vicinity of the rapids is 0.87 feet.

"7. From tables of the U. S. Engineer's Office as the best available data:

"(a) The elevation of the water surface of St. Marys River at Southwest Pier above the locks, with 0.20 foot added, for the period after January first, 1908.

"(b) The elevation of the water surface of St. Marys River at northeast Pier below the locks with 0.20 foot added.

"(c) The total fall from Southwest Pier gauge above the locks to Northeast Pier gauge below the locks.

"(d) The hourly elevations at both Southwest Pier and Northeast Pier, 0.20 foot to be added to each.

908 "8. Table of discharges based on observations of the U. S. Lake Survey in 1909, for the flow in St. Marys River since January 1st, 1908, appended.

"9. General conditions in 1908:

For Southwest Pier	600.00	601.00	602.00	603.00
Inlet C.-D. Co. Canal	599.85	600.85	601.85	602.85
International bridge	598.74	599.50	600.25	601.02

"Change in stage at International bridge is 0.76 ft. for 1.00 ft. at the Southwest Pier.

"10. For conditions of January-February, 1911:

For Southwest Pier	600.00
International bridge	598.82
East line C.-D. Co. property	590.20
Discharge through rapids	28,300 cubic feet per second.

"11. Change in elevation on the east line under conditions of January-February, 1911, is 0.63 ft. for a change of 1.00 ft. at Southwest Pier.

"12. That conditions at the Chandler-Dunbar east line are:

"*Total discharge of rapids.*

For SW. Pier gage.	Discharge.	Area.	Velocity.	Velocity head.
	Cu. ft. per sec.	*Sq. ft.*	*Ft. per sec.*	*Feet.*
600	26,740	4,900	5.46	0.47
601	42,040	6,160	6.82	0.73
602	57,340	7,420	7.73	0.93
603	72,640	8,680	8.37	1.10
604	87,940	9,940	8.85	1.21

"13. That in addition to the flow through the rapids as given under paragraph twelve, there is a quantity of water flowing through other outlets, estimated to be 20,060 cu. ft. per second, distributed as follows:

Through the Michigan-Lake Superior Power Canal	12,300 cu. ft. sec.
Through the Edison Sault Power Canal	980 cu. ft. sec.
Through the Canadian Power Canal	6,130 cu. ft. sec.
Through the American Ship Canal	450 cu. ft. sec.
Through the Canadian Ship Canal	200 cu. ft. sec.
Total	20,060 cu. ft. sec.

"These quantities were deduced from data obtained in 1909 by the U. S. Lake Survey.

"Also that the total discharge of the St. Marys Rapids, in cubic feet per second, from January 1, 1908, to date is represented by the equation:

$$Q=15{,}300\ (\text{elevation at SW. Pier gage}-600)\times 26{,}740$$

and to the discharge of the rapids, as computed by this equation, should be added 20,060 cu. ft. per second for diversions through other outlets.

"14. The proportion of water flowing continuously over the submerged lands to the south of a line delineated and designated as the international boundary line on the large Chandler-Dunbar map, is taken for the purposes of this case as 65 per cent for all river stages. This is based on river conditions existing prior to the building of the international bridge.

"15. The elevations of water surface in the rapids, as determined by the survey of January-February, 1911, are substantially the same for the same stage of water at SW. Pier gage as existed before the building of the tail-race embankment of the Edison Sault Company.

"16. The four maps of the survey of the rapids of January-February, 1911, are accepted as substantially correct.

"17. That conditions at the international bridge as to the areas of spans are correctly shown by the table on page 2836 of the Report of the Chief of Engineers for 1903, and that the areas of spans 1 and 2 below a line at elevation 600.1 at the bridge are 589 and 720 sq. ft., respectively. These tables and the above elevation are based on the 1877 levels, which are 0.20 ft. lower than the 1903 levels used elsewhere in this report.

"18. That at the west boundary of the Chandler-Dunbar property the mean velocity is substantially 1.6 ft. per second, the velocity head is 9.94 ft., and the elevation of water surface corresponds substantially to that simultaneously existing at the SW. Pier.

"19. The quantity of water, amounting to 4,000 cu. ft. per second, recommended for lock and log purposes by the International Waterways Commission is apportioned as follows:

"1,500 cu. ft. per second for five locks for eight months, equivalent to 1,000 cu. ft. per second for the year; and 3,000 cu. ft. per second for a log chute and additional locks.

"All of which is respectfully submitted.

"(Signed) JOHN BOGART,
"*Chairman of Conference of Engineers.*
"(GLW. FCS.)

"MARCH 2, 1911."

71400—13——36

909 "United States Lake Survey, table of discharges St. Marys River from January 1st, 1908, to December, 1910, inclusive.

"These discharges are based on the equation

"$Q=15{,}300(SW.\ Pier-600.00)+26{,}740+20{,}060$.[1]

Year	1908	1909	1910
January—Elevation at SW. Pier gage	601.04	600.56	600.87
Discharge in cu. ft. per sec	62,100	54,700	59,400
February	600.75	600.63	600.79
	57,600	55,800	58,200
March	600.81	600.70	600.44
	58,500	56,800	52,900
April	600.18	600.10	600.72
	49,200	48,000	57,500
May	601.10	600.84	600.90
	63,600	59,600	60,500
June	601.76	601.09	601.20
	73,700	63,400	65,100
July	602.07	600.95	601.32
	78,400	61,300	66,900
August	602.00	601.65	600.94
	77,300	72,000	61,100
September	601.67	601.16	601.19
	72,300	64,500	64,600
October	600.88	600.94	600.83
	60,200	61,100	59,400
November	601.11	601.06	600.32
	63,700	63,000	51,600
December	601.61	601.09	600.18
	55,800	63,100	49,200

"[1] NOTE.—In computing these discharges the quant'y of water used by locks in January, February, and March is diminished by 600 cubic feet per second; and in December and April, by 300.

"(GLW. FCS.)"

L. C. SABIN recalled, testified that he was United States assistant engineer in charge of the Government works at Sault Ste. Marie. That he had a plan for the improvement of the river in respect to water power, made since the taking of the property. Plans for building a head race from the bridge down stream to about opposite the present plant of the Edison Sault Electric Company, forming a head race which may be used for taking the water to the present power plant of the Edison Sault Electric Company and for filling locks and other things of that sort. I have a map showing these plans (p. 451). Map marked. Introduced and marked "Deft's. 29."

That plan represents a sheer dam, wing dam or dike running from about the north end of the present Edison Sault improvement northwest to a point a few hundred feet above the railroad bridge. It strikes the railroad bridge at the fourth pier above the abutment (p. 453).

The plan for this work includes this head race and many other things, a new navigation canal west of the bridge, building of the side walls, the timber pier out beyond the limit of this map.

Total amount to be paid is five or six hundred thousand dollars.

We don't know how much excavation will be removed in this area marked "New head race."

It wasn't a flat bid to do the business, but a bid by the cubic yard. Cubic yard of excavation 80c I think.

Construction of dikes $8 and a half per linear foot (pp. 455-6).

It was in my mind in my original plan for this work that it should be used to a certain extent for navigation. The idea of this develop-

ment is to permit power to be developed in the Edison Sault Power plant. There is also the possibility of using this head race as a forebay from which to fill the new locks, but this plan does not indicate it (p. 457).

"Q. What other use of land or water would there be for the purposes of navigation other than the operating of the locks?

"A. I suppose that land might be required for regulating works, regulating the levels.

"That would be what might be called a cross dam across the river, or it might be a dike diverging from the American side to the Canadian side, with suitable appliances to regulate the amount of flow.

"I believe it is practicable to build works in the rapids so as to control the outflow of Lake Superior and practically equalize the flow. If you include excavation in the term "construction" it would, I think, be possible to equalize the flow (pp. 459-60).

"Q. To what end would you have excavation?

"A. I think that would be necessary in order to increase the available discharge area at times when the water went extremely low, because an equalization of the flow would mean a very great disturbance of levels, and the water level to equalize the flow would go lower than it does at present.

910 "If I were going to design such works, I should try to find out how much had been the average flow out of Lake Superior for the last 40 or 50 years, or as long as I had records, and plan my works to pass that flow at any stage which such a flow might give to Lake Superior, and in order to do it, I would have to excavate at the head of the rapids, I think (p. 461).

"I don't say it would be physically possible for an engineer to say today what flow he would have to provide for in order to forever afterwards have it that the flow from Lake Superior should be the same, but he could arrive at it approximately by knowing the conditions that had prevailed in the last fifty years (p. 462).

"Arrangement might be made by excavation so that an extraordinary amount of water might be discharged if that emergency arose (p. 462).

"Q. How wide a space does a lock of the capacity of the new third lock take?

"A. About 150 to 200 feet in width.

"Q. What is the distance between the possible fourth lock and the international boundary line, about?

"A. About 1,200 feet.

"Q. What would be necessary, in addition to the present proposed works, to complete what you might call remedial or intercepting works so as to practically regulate the outflow of Lake Superior?

"A. Those works might be located at various points along the rapids, and they would consist of a dam with openings through it and gates to control the flow of water through those openings.

"Q. Supposing the present plan to have been carried out, would not the natural plan then be to carry a cross dam from the head of the wing dam or dyke to the Canadian intercepting works?

"A. No; I don't know that you could say that was the natural thing to do. It could be done that way; that is one way it could be done.

"Q. Will you tell us what you think would be the natural way to do it?

"A. Such a dyke might be carried across either there or down stream from there out to the location of what we call the east line of the Chandler-Dunbar property (p. 465).

"If you carried a dam across at the east line of the Chandler-Dunbar properties, you would have to build a heavier wall, you would be in deeper water on a lower level. In addition to that you would have, from the north end of your dam, to carry up a wing wall or dyke to the Canadian works. It would be the cheapest plan to carry the wall directly across from the head of the proposed dyke to the Canadian works. But it might be advantageous to put it down lower to save excavation. The lower one would save excavation and the upper one would save masonry (466).

"Q. The works would operate as compensating works to the draught of the water through the Michigan-Lake Superior Power Company's canal?

"A. To some extent, yes, sir; if the full amount of water which would ordinarily flow through the spans included in the head race were not taken through that head race, then to that extent they would be compensatory works for water taken at other places.

"The only power development at present on the American side are the Edison Sault and the Michigan-Lake Superior (p. 470).

"Q. Was the fill ever made to the extent that those letters respecting the quit-claim deed indicated that it should be made so as to furnish a foundation for a railroad track?

"A. I don't remember what the letters indicated. I supposed that it had been made about as indicated in those letters. At the same time, it is not sufficient at present to make a railroad siding. But there is no practical difficulty in filling it to that extent and putting the railroad siding on it."

Here respondent's counsel produced a map, marked "Respondent's Exhibit 17," and asked,

"Will you look at the map which I now produce? What does the yellowish strip indicate?

"A. That probable indicates the land purchased from the Chandler-Dunbar Company for the canal widening, covered by that quit-claim deed. The narrow red lines indicate a railroad which has been in existence in the past at one time or another. It would be practicable to put a railroad track on the line represented by the double black line. There are no physical conditions that I know of that would interfere with its construction. It would not be expensive to make that filling in shape for a sidetrack.

"Q. If the property north of the strip claimed by the United States had not been taken, it would have been practicable, would it not, to have put on a side track for cars to any point in the rapids north of the Edison Light Company plant without interfering with any Government property, which was then Government property?

"A. Yes, sir; I think it would. I mean that railroad that you pointed out here, about on the lines indicated by this double black line" (p. 471–2).

On cross-examination he testified: "I think that embankment price is a fair bid."

"Q. Is it your judgment that with the 35 per cent. increase over the 15,000 cubic yards estimate that you made, that this forebay will carry water necessary to operate the nine wheels?

"A. That would depend on the level of the water above and on the physical conditions as regards ice and things of that character, whether that excavation would be sufficient. It was my judgment at the time that it would. But I have changed my mind. I think the conditions are not quite as good as I expected they were when
911 I made the plan. The change in my opinion arises from lower stage of water than had been prevalent and a higher elevation of rock than I had expected required more excavation. The conditions this winter in regard to ice and low water have been exceptional. Have indicated that a larger head race was required than we had thought before" (p. 479–80).

Thereupon this respondent produced as a witness JOSEPH RIPLEY, who testified that he had been a civil and hydraulic engineer since 1876. First employed at Sault Ste. Marie. In charge of those works from 1898 to 1906. Then employed on the Panama Canal. Was a member of the board of consulting engineers to determine the type of the Panama Canal and later was assi'tant chief engineer and had in charge the designing of the locks, dams, and regulating works and construction work, and is now employed as advisory engineer to the superintendent of public works of the State of New York, and has charge of the maintenance and operation of the canals and the letting of contracts and seeing to the progress of the work on the new barge canal. In November, 1909, was appointed a member of the consulting board of engineers for New York State canals and now occupies that position (pp. 480–1).

"Q. When you have testified to the expense of developing the Chandler-Dunbar water power, what works have you had in view?

"A. I should build a dyke along their northern boundary, starting above the international bridge at the south end of the Canadian intercepting works and extending it downstream along their north boundary line to their easterly boundary line, and then building the power-house construction along somewhere near the easterly line of the Chandler-Dunbar property.

"You would have to put in suitable gates for the discharge of the water. You would discharge a certain portion, or all, according to the state of Lake Superior, through your turbine wheels (p. 488).

"Q. Would it be practicable through your remedial or intercepting works to discharge 65 per cent of the flow of the river if you were not entitled to use but 50 per cent of the power?

"Yes, sir; it could be so designed without material increase of expense (p. 489).

"Q. Is it in your opinion practicable to regulate the flow to the volume of 80,000 second-feet through a long series of years?

"A. It would be expensive possibly to keep it exactly at that volume, but the range for past years based on monthly means has been about three feet from low-water to high-water stages, and that could be reduced with the works that you would put in for construction purposes to about eighteen inches and with a steady flow of seventy to seventy-three thousand second-feet.

"Q. You apportioned 1,800 cubic second-feet to the carriage of forest products, did you?

"A. In my mind the use of that 1,800 second-feet would be for forest products and for a short period of a few days in the spring to the passing of ice.

"Q. Would it be practicable to construct in your remedial works means for passing forest products?

"A. Yes, sir. You could build a sluiceway with a stony gate and keep that closed except at the time that you want to pass the products.

"Q. Suppose products were to be passed substantially as appears in this table on page 20 of the Statistical Report of Lake Commerce, what would be the volume of water necessary to pass those products through your gates?

"A. Your question limits it simply to forest products and does not include the ice?

"Q. And the ice.

"A. One hundred second-feet would be ample.

"Q. If you returned 1,700 second-feet, then, from that use to the use of commerce through the locks, what volume of commerce in tonnage could be carried through the locks with the use of the 4,000 cubic second-feet?

"A. Approximately a thousand million tons (pp. 515–16).

"Q. Mr. Ripley, will you state what effect on the available horsepower in the river for power purposes the taking of water for the filling of locks from the fore bay would have?

"A. It would make no difference as to the water-power development, because that water goes for navigation purposes, and it is taken from the upper pool in either case, whether it goes through the water-power fore bay or goes through the ship canal (p. 530).

"Q. Do you know of any structure necessary in aid of navigation through these rapids other than those locks and a logway?

"A. Remedial works of some sort to compensate for the water taken through the power canals.

"Q. Will such remedial works decrease or increase the amount of power developed in the river?

"A. It will increase the amount of power.

"Q. Do I understand then that aside from the locks and the logway and such remedial works as may be necessary you can conceive of no other structure possible in those rapids in aid of navigation?

"A. I can not (p. 530).

"Q. Have you any information as to the total effect of all constructions in the river and vicinity, including the side canals, upon the level of the river at the head of the rapids?

"A. Only in a general way. The placing of the piers for the international bridge and the work done by the Chandler-Dunbar Company, or the original company there, with reference to the
912 construction of their new power canal, placing the material out in the rapids, raised the level of Lake Superior, I think, permanently above five inches" (pp. 532–3).

Here this respondent produced as a witness THOMAS W. ORBISON, a hydraulic engineer of large experience both as engineer and contractor, who testified:

"The cost of bringing the power to the mill seat is the building of a wing wall along inside the international boundary line, on the south side of it, and I estimate that cost at $107,380.

"Q. That includes proper gates for the discharge of excess of water at any time?

"A. That includes about 100 feet of gates, 100 feet in length.

"Q. Would it or would it not include facility for discharging forest products through the channel?

"A. It would.

"Q. What would you consider the reduction in value on account of the use of more volume of flow than 4,000 cubic second-feet for navigation or any other public use, for each additional thousand second feet?

"A. Well, I would make that—I would consider that pro rata for anything up to one-third of the volume of flow.

"Q. What would you consider the reduction in value on account of additional space taken for locks beyond the possible fourth lock, shown on the Government map?

"A. It would make the improvement more expensive for the reason that it would shorten up the distance remaining for improvement between the contemplated locks and the international boundary line, and would only lessen the value of the power to the extent of the interest on a somewhat greater cost for improvement.

"Q. Comparatively slight difference?

"A. Comparatively slight difference.

"Q. So long as you have room enough to build mills in the stream to use the power. Have you considered the question of the practicability of building remedial works in the channel to equalize the flow of the St. Marys River?

"A. In the estimates that I have made I have considered that the flumes used for harnessing the power would constitute remedial works.

"Q. Not flumes alone?

"A. Well, the flumes and the gates connected therewith.

"Q. To include the dyke?

"A. Yes.

"The COURT. It would be the flume, I suppose.

"A. The flume would be the larger portion of it—the flumes.

"Q. On what did you base your calculations regarding remedial works?

"A. My plan was to start in at the present Edison Sault Electric Company's plant and build flumes for power purposes in a northerly direction out to within a hundred feet of the—125 feet, say, of the international boundary line, and then install some taintor gates with a capacity of about a hundred feet width of river, and then a dyke from there out along inside of the international boundary line to the bridge pier of the International Bridge, that is just about on the international boundary line (pp. 549, 550–1).

"Q. Have you made any examination of the capacity of the Michigan-Lake Superior Power Company's canal at the Soo?

"A. I have.

"Q. What amount of water can that canal carry with due regard to economy in the use of water?

"A. My estimate of the capacity of that canal with reasonable economy is 20,000 second-feet.

"That would cause a loss of head of 1.09 feet, which would be, in my opinion, very economical (pp. 556–7).

"I have figured the cost of bringing this power to the shaft, and have a plan of the construction which I would make. (Witness produced plan marked 'Defendant's Exhibit 21.') This plan projects remedial works. I estimate the cost of the execution of this plan to the point that you bring the power to the shaft at $1,834,736. And I figured the cost of operation and depreciation, including water rental at $12.06, figuring the rental of the water power at $5. A fair rental value of the water on the shaft is $18 (pp. 564–5).

"To use this water I would build a pulp mill in the bed of the stream over these flumes. There is ample room for it. If there were no lock built outside of the possible fourth lock, there would still be room for the major portion of this pulp mill. I think that an arrangement could be made to develop it all, possibly. It might cost a little more per horsepower (p. 566).

"In making my computations I have assumed that the high-water discharge on the Canadian side was 32 per cent and on the American side 68 per cent; the engineers fixed the amount of flow on the two sides of the international boundary line at 35 per cent and 65 per cent; but taking my figures for it, the Chandler-Dunbar Company would in high water have to take care of 76,550 second-feet; that is, with the extreme high flow at 112,574 second-feet, I believe that is correct, I had to pick it up here. Then to take care of that we have provided——

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"Q. (Interrupting.) You mean to waste it when you say to take care of it, do you not?

"A. Well, I mean to get rid of it through our works, and
913 through our remedial works; we can get through with that by blocking our wheels, if we are not running them, a part of it, and the rest through our remedial works, and our remedial works consist not only of—the openings in the remedial works consist not only of the gates that I have shown, but gates in the back ends of our flumes; every one of our flumes is opened or capable of being opened by raising a gate and letting the water out.

"Now as I started to say I provided for taking care of 93,288 second feet, and the flow in high water as I have already said, is 76,550 second feet, leaving a leeway of 16,738 second feet.

"Q. Now have you also provided for the passing of forest products?

"A. I have.

"Q. To what extent?

"A. Why, I hadn't thought of the extent of it.

"Q. I mean is it ample for all that the testimony shows has ever gone over?

"A. I should think several hundred millions a year.

"Q. And with what use of water?

"A. I have considered that the 4,000 second feet for navigation took care of the——

"Q. (Interrupting.) No, I mean in the actual taking care of logs or timber going down stream, with what use of water?

"A. I haven't considered that question, because I didn't think there would be any logs going down, to amount to anything.

"Q. Is it considerable or inconsiderable, the amount of water necessary to carry the logs?

"A. Why, it would be inconsiderable" (pp. 578–9).

"(Here witness produced map marked 'Exhibit 22.')

"Q. (By counsel for petitioner.)

"Have you taken into consideration in your estimate of values there, the contingency that the Government would not permit the building of this dam here, and of the side dam there, of that contingency?

"A. I have not.

"Q. Your figures with reference to values are based upon the assumption that this proposed plan can be put in without any question from the Government?

"A. Yes, sir.

"I had under consideration the excavating up here towards the international bridge. That would depend on whether the company developing thought it would be advisable or not to save friction head. That would be the purpose of excavating up there (p. 580).

This respondent produced as a witness JOSEPH H. WALLACE, who testified to very long and varied experience in engineering and

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building of manufacturing plants and water power developments in the United States, in Canada, and in Sweden, Norway, Germany, and France. He testified:

"I was called to the Sault in 1902 in connection with a proposed plant on the Chandler-Dunbar Water Power Company's property, and about that time for a proposed plant to utilize power from the Michigan-Lake Superior Power Company, and building a pulp and paper plant down below at Hay Lake Channel, to be operated from the Michigan-Lake Superior Power Company's canal.

"In connection with the plant proposed on the Chandler-Dunbar Water Power Company's property, we investigated sufficiently to see that the building of a plant at that point was practical and that there was power enough for the purposes for which they proposed to build a plant. They proposed to build a plant requiring about 9,900 horse power.

"We completed our plans for pulp and paper plants and received bids and had practically closed bids on some of the apparatus and on foundation work. The project was discontinued on account of uncertainty as to title and the investors' unwillingness to proceed under that condition. I have the plans made for that development. I produce them here for examination by the engineers of the United States.

"In connection with that enterprise, I made calculations respecting the cost of development. My estimate for the cost including the ground wood pulp mill and electric power for operating the chemical pulp and paper plant to use 9,900 horse power, total plant, was $1,661,000. This estimate was corroborated by bids from various contractors.

"It appeared to be a very practical situation for a pulp and paper plant in every respect. We did not consider the project a closed one. We have had several conferences since that time regarding the possibilities of proceeding (p. 624).

"Cost is slightly greater today. Would estimate present cost $1,783,640. Difference of 8 per cent or $155,628 (p. 625).

"I have estimated the cost of developments which appear to me logical for a power company to make if they were selling power in the form of water delivered to the wheels or to the flume of a consumer. That would include such canals and excavations for bringing the water to the flume and taking it from the flume as would be required, outside of the plant itself. That would include a dike along the Canadian territory line, the International boundary (p. 628).

"I estimated the cost of that at $233,415, including cost of necessary dikes, forebay, and tail-race excavation. Estimate based on concrete which would show very slight depreciation.

"There is a copy of both of these plans in this report I handed in (p. 629).

"(Plans offered in evidence. Parcel thereof was Plan A.)

914 This respondent produced as a witness GARDNER S. WILLIAMS, professor of civil and hydraulic engineering at the University of Michigan, residing at Ann Arbor. He testified:

"I designed the plant of the Edison Sault Company, located in the rapids of the St. Marys River, and superintended its construction. It was under my supervision.

"The embankment of the Edison Sault plant might need a little repair now and then due to the effect of ice or something of that sort, but it would be inconsequential. Such work is very enduring" (p. 678).

Cross-examination:

"$100 per horse power that I testified to as the cost of a plant to operate upon a 9½ foot head relates to a plant to use all the water to which the respondents are entitled that is not taken through the existing plant. I figured $1 for earth and two and a half for rock and $12 to $15 a yard for concrete. The thinner sections cost more, and the heavier ones can be bought for less. They come in at $12 and the other at $15 (pp. 680–81).

"Q. And how many turbines for each electrical unit for the extension of the plant across the river in your plans?

"A. Two (p. 681).

"Q. Respecting future development, which you state would be at the rate of $100 per horse power, will you state how you purpose to make those developments at that figure?

"A. By extending the plant on out into the rapids in a manner similar to that on which the original development was constructed (pp. 691–2).

"Q. Have you, Professor Williams, a plan that you can say, as an engineer, that you can develop and consume all of the water you claim these people are entitled to at $100 a horse power?

"A. I have. In general terms it means a unit consisting of two generators, each driven by two vertical wheels, to which it is geared. I would have had with me today the plans for this construction and would have been glad to turn them over to your engineer for checking, had it not been for the fact that the time of myself, which has been required in other matters in connection with this case, precluded the finishing of them until a few moments before I came on the stand.

"Q. Will you have objection to our engineers seeing them this evening?

"A. I think I can help them so that they can see them" (pp. 692–3).

Here this respondent produced and introduced in evidence respondent's Exhibit 24, being large map showing general situation, and rested its case.

Here, to maintain the issue on its part, the respondent, the Michigan-Lake Superior Power Company, produced as a witness LEONARD

H. DAVIS, who testified respecting the canal of the Michigan-Lake Superior Power Company:

"The capacity of the canal is 32,000 cubic feet per second. It is designed to operate under a head of sixteen feet, and it is expected that there will be about 40,000 horse power available (p. 715).

"The flow through the canal since the first of January, 1908, has been, as given in the conference of engineers, 12,300 cubic feet per second. That is correct for August, 1909. The average flow for the year 1908 was 10,450 cubic feet per second; for 1909, 7,210 cubic feet per second; for 1910, 8,020 cubic feet per second, or an average for three years of 8,560 cubic feet per second.

"The figure 32,000 cubic feet per second is the capacity of the canal as designed. It will be the actual capacity of the canal" (p. 718).

On cross-examination by counsel for petitioner, he testified:

"The flow has been stopped in the Michigan-Lake Superior Power Company canal for more than a month at a time. The longest period was about three months and complete shut down in 1909, and for a short period the flow was limited to one turbine. Shortly after that the canal was closed for repairs" (p. 719).

On cross-examination by counsel for this respondent, he said:

"Where, on a continuous fall like this, you will build your dam depends in large part upon the particular lay of the land. If you build it at the foot of the fall you will have no tail race excavation and large construction and under some conditions more excavation to bring your water in. It is purely and simply a question of economy as to where you build the power house, whether you saved more by lessening your tail race excavation or by lessening your dam or power house construction, just as you might call it. As you move up you increase the expense of the work below and you lessen the expense above. It is a matter of finding the economical point" (p. 721).

Here respondent, the Michigan-Lake Superior Power Company, rested its case.

The petitioner, to further maintain the issue in its behalf, produced as a witness SETH A. MOULTON. On direct examination he testified:

"Q. You have studied the conditions at St. Marys River?

"A. I have.

"Q. And the site for the development under consideration, have you?

"A. Yes, sir.

"Q. Do you consider it a desirable and practicable location for a pulp or paper mill plant, such as is projected by Mr. Wallace?

"A. I think it is entirely practicable from the construction standpoint; yes, sir.

"Q. Have you studied the plans prepared by Mr. Wallace?

"A. Yes, sir.

915 "Q. What is your opinion of the contemplated design?

"A. The general idea is the logical solution of the problem.

"Q. Have you examined the estimated cost for the construction as mentioned in Mr. Wallace's report, and, if so, what can you say regarding that?

"A. In general the unit cost employed is correct. I found that there was one or two items omitted, such as engineering, contingencies, cost of wood-preparing machinery, and a few other minor details" (p. 727).

"The cost of controlling works, exclusive of the ground-wood mill and power plant, would be practically $10 per theoretical horse power—about $337,000; that is, considering that the head works would be constructed for pulp-mill uses only, not for regulating the flow of Lake Superior or taking care of any excess discharged" (p. 728).

L. C. SABIN recalled by the petitioner:

"Q. I call your attention now to Exhibit 69, and ask you what that situation represents?

"A. This is a fleet of vessels waiting to pass the locks because of the ice conditions in the river being such that they could not proceed at that time. This is the legend on the back:

"'View showing nineteen vessels waiting to pass through locks, being part of fleet of about 240 vessels delayed at St. Marys Falls Canal between April 24 and 29, 1907, on account of ice in the river above canal'" (p. 813).

Respecting the plan adopted and being carried out by the United States for water-power improvement in the rapids, he testified:

"I estimate the cost when it is completed—and the present power house is completed; that is, by putting the units in the remainder of the power house which is not now occupied—as being $511,000, and that would develop an electric horse power of 2,400, giving the cost per electric horse power on the switch-board of $213 per horse power. That does not take the entire flow, because on an 8.8-feet head I do not know how to develop the full amount of power which that flow would have.

"Q. That is figuring on what head?

"A. 8.8 feet of head which will be left on the Chandler-Dunbar property after the deductions I have noted. By building another power house, so as to develop all of the power which the 7,800 cubic feet would develop, I get a total cost of the development of $784,000 for 5,600 electrical horse power, a mean of $140 per horse power. If this power were used on a 15-foot head with the present power house completed, I estimate the total cost of the development $575,961, giving 4,800 electrical horse power, a mean cost of $120 for electrical horse power on the switch-board. If another power house is built—and it is considered that they have the 15-feet fall for which I understand the present power house was designed—they can then use the full 7,800 cubic feet per second and develop 9,575 electrical horse power, at a total cost of $1,037,398, or $108 per electrical horse power on the switchboard.

"Mr. FELLOWS. Is there anything further that you had in mind that the court inquired about?

"A. I think that covers it.

"Mr. CLUTE. I call your attention to this memorandum of delays at the locks. Is that a compilation from the records in your office showing the delays at the locks of vessels?

"A. Yes, sir; it shows the length of time and the blockade; in some cases the number of vessels delayed from several accidents which have occurred from 1890 down to date" (pp. 822–3).

On cross-examination in behalf of this respondent, he testified:

"Q. These estimates of cost include excavation of tailrace from below?

"A. They include the tailrace as figured—yes they include the actual cost of the tailrace, and in case further tailrace excavation were required under the 15-foot head and under the 8.8-foot it would be required for the full development. In those three cases there is an allowance for additional tailrace excavation; in the one case of developing only a part of the power under an 8.8-foot head. In the present power house no additional tailrace would be required and no extra allowance is made beyond the cost of the present one.

"Q. Have you had such experience in hydraulic construction as gives you a definite opinion as to the economical point of developing this entire power?

"A. I have not given any such detailed study to the problem as would allow me to make a statement that would be of any value, I think, Mr. Hooper. I am not an electrical engineer, and there are certain parts of the cost which I would not know about without looking up a good deal.

"Q. And you would not be willing to express an opinion whether the development would be less expensive or more expensive to make it at the foot of the entire rapids or at the middle of the rapids?

"A. Well, I should think it might be more economical to make it a short distance further down stream than at present, but not at the foot of the rapids. From my general knowledge, I should think three or four hundred feet or something like that further down stream, where the rock ledge still holds up pretty well and drops off quite suddenly, that that would be the ideal place for the power house.

"Q. On account of less excavation below?

"A. Yes, sir" (pp. 825–6).

The petitioner then produced witness ALEXANDER G. BURNS, who testified that he was in charge of the Weather Bureau reports since 1888 or 9 (p. 832).

"There was ice in Whitefish Bay two years ago that caused
916 boats going up or coming down to stop. When they finally broke the blockade up at Iroquois Point and Whitefish Bay there must have been a hundred or so come down (p. 835).

"They smashed the railroad bridge about four years ago. That caused great detention. Boats were very slow in getting through

It wasn't anything like the ice blockades, of course, because the Canadian lock was in operation and could slowly drain them out (p. 836).

"Last year I was in the office when the 'Ellwood' struck the gate of the Poe Lock. All the big draft boats had to go to Canada. That caused a great deal of detention. I can't say it would compare with the ice blockade I spoke of; at the same time there was serious detention" (p. 837).

JOHN BOGART, recalled in behalf of the petitioner, testified:

"The constructions which would be required to make it possible to deliver this water under that head to a consumer would, I suppose, be a dam across the rapids from the south side to the neighborhood of the international boundary, and a dyke or dam running from the end of first dam westerly to the head of the property. This dam, the north and south dam, would have to be provided with means for delivering the water under this head to a power plant or a consumer, and therefore I judge it should be placed sufficiently above the east boundary of the Chandler-Dunbar property to permit a power house to be put between this dam and the east line, as has been indicated substantially upon the plans presented by Mr. Orbison.

"I have made an estimate of the cost of the necessary constructions, which amount to about $525,000.

"Q. Will you repeat that amount?

"A. It is $522,500. I have considered that to be represented for the sake of determining an interest charge by five per cent bonds at 80 per cent, making a bond issue, to look at it that way, of $650,000. It exceeds that amount a little, but I have called it $650,000" (p. 840–1).

LEONARD H. DAVIS, recalled by the petitioner, testified:

"The Michigan-Lake Superior Power Company sells power.

"We practically have only two contracts at present in force: Contract for power delivered at the turbine shaft is for 20,000 horsepower, of which about 10,000 is now being delivered. Other is 350 horsepower. Both are 24-hour powers" (pp. 844–5).

Petitioner produced as a witness Col. CURTIS MCD. TOWNSEND, an engineer in the employ of the petitioner, located at Detroit, and in charge of the development, having charge of the locks farther north and the waters connecting the works. He testified:

"The Government needs water for controlling the levels of the Lakes (p. 873).

"We base our work on what we call datum planes—that is, certain levels of water above and below our improvements—and it is essential that we should keep the levels of those planes or above them, in order to have the depths in our channels which we are endeavoring to obtain.

"The Government needs the water of St. Marys River for that purpose.

"There is a rock formation extending both above and below the international bridge. Its crest is just above the bridge and extends across the river. It creates a dam which holds the water in place and creates Lake Superior. I don't thing it would be wise for the Government to permit the excavation of that natural dam. It naturally regulates the water supply or the height of Lake Superior, and I think it would be very much better left to nature than to put in a company that is organized for commercial purposes (p. 874).

"Lake Superior is the best regulated body of water that I know of, by nature.

"I have been on divers boards having charge investigation of questions of navigation. Since I have been in this department I have closed down the Michigan-Lake Superior Power Company's canal every winter except this winter, and my impression is that two winters we closed it entirely for a portion of the time—or one winter we closed it down entirely and the other winter we allowed them to run one wheel, because the waters of Lake Superior were getting lower than they should be (pp. 875–6).

"The harbors of Lake Superior are based on a plane which is similar to the one I mentioned in reference to the locks at the Soo. We have a plane below which we excavated, and if the water falls below that plane we have not the depths in our harbors which we expected to have. 601.5 and 603 are the limits within which we regulate the Michigan-Lake Superior Power Company.

"The shallowest water in our navigable waterway from Duluth down would be the lower miter sills of our lock or the floor of the lock. I am now attempting to control the levels of the Lakes by allowing the water to flow through the Michigan-Lake Superior Power Company's canal. They are allowed to flow 10,000 cubic feet a second.

"They have never used 32,000 cubic feet a second through that canal, but have generally used about ten or twelve thousand cubic feet. They have been allowed to use the amount this winter that they were using last summer" (pp. 876–7).

On cross-examination, he testified:

"When I said that the waters of the river are needed to control the level of Lake Superior or the Lakes, I meant that the Government shall have power to prevent the building into those rapids of any structure which will interfere with the level of the Lakes, or cutting any opening that will have any effect upon the level of the lake. That is all I mean. I think I have that power now (p. 878).

"Excavation in the river east of this dam would not affect its stability as long as it did not affect the crest of the dam.

917 "Q. Your plans which you are now carrying on are based upon excavations in the river below that crest?

"A. The plans I am carrying on are cutting right through the crest.

"Q. Then provided the Government controlled the amount and the nature of the cutting through the crest, the crest is not necessary to be preserved?

"A. Well, if the Government did it, it would. But I think the crest should be preserved before any private corporation should do it. The Government can take hold of it and regulate that crest as it sees fit. Anyone else can do the same thing without injury to navigation, with absolute Government control.

"Q. It follows as a matter of course, Colonel, that what the Government can safely do in that crest itself, they could authorize some one else to do without any more damage than they would do themselves?

"A. No; it doesn't follow by a good deal.

"Q. It doesn't follow?

"A. Not by a long shot.

"Q. Having in mind simply the safety of this dam and the control of the levels of the lake, anything that the Government could do itself in the way of cutting through that crest could be done by some one else under the authority of the Government without injury to navigation, is not that true?

"A. Not without the Government had absolute control.

"Q. To what extent do your plans now contemplate the cutting down of this crest?

"A. Several feet (p. 880).

"I have considered the question of remedial works in the river for the purpose of regulating the flow of Lake Superior and maintaining the level between 601.5 and 603, and the location of such works, to a certain extent.

"I think the construction of compensating works would be beneficial to navigation, and such works would not necessarily interfere with the development of water power in the rapids to a limited extent.

"Q. They could be so located, could they not, as actually to increase the amount of power development within the rapids?

"A. I don't think that they could, because I don't believe that it is capable of regulating Lake Superior any better than it is now being done by the Creator. I think He has limited Lake Superior as far as it is practicable to do it at the present time (p. 881).

"Q. Does not the very idea of compensating works necessarily imply that the level of Lake Superior will be kept above the point where it has sometimes fallen to during the past few years?

"A. Where I make the difference between compensating work and a regulating work is this: The object of a compensating work would be to compensate for any water or any damage that was done to the flow of Lake Superior by man in the way of a power company; and regulating works would be a dam to change the oscillations of Lake Superior, and I don't think that that is practicable.

"If there were no such openings as the Michigan-Lake Superior Power Company's plant and the Canadian plant, works might be placed in the river that would measurably increase the level of Lake Superior so as to allow a somewhat, if limited, increase of the flow of that river in low periods. But you have your oscillations on top

of that level. Those oscillations which occur by nature will occur after you have built your dam (pp. 882–3).

"Before the Michigan-Lake Superior Power Company's plant was put in, and before the Canadian power plant was put in, the level of Lake Superior frequently ran below 601.5.

"I don't think it would be practicable to keep the lake between 601.5 and 603. You can raise it so that it will not go below 601.5 as often as it does, or you could lower it so that it would not go above 603 as often as it does, and that is desirable to navigation, to maintain it above 601.5.

"The putting in the international bridge did something to raise the level of the lake (883).

"Now, instead of using Lake Superior at 601.5, it is desirable to lower the level of Lake Superior and raise the level of Lake Michigan. The water is lower on our lower miter sills than on our upper miter sills. It would be far preferable for navigation if we could lower Lake Superior a foot and raise Lake Michigan three or four inches.

"Q. How would you raise the level of Lake Superior?

"A. I should build a dam right out on the crest of that I have been speaking about. I would just reduce the discharge opening" (p. 884).

Witness now reads from report of the International Waterways Commission:

"Attention is invited also to a discussion of the use of Lake Superior as a reservoir, which has been proposed by persons not familiar with the Great Lakes, to compensate for the diversion of water through the Chicago Drainage Canal. The result of the condition is to show: 1, that Lake Superior being naturally one of the greatest and best regulators of flow to be found in the world, maintains a flow in the St. Marys River, its outlet, which is remarkably uniform; 2, that uniformity of flow in that river is essential to the best interests of navigation of the river itself; 3, that during the winter months when navigation is suspended, this uniformity of flow is still necessary to maintain the level of Lake Huron, and keep it in con-
918 dition to maintain in its turn the St. Clair and Detroit Rivers in the spring when navigation opens. It is not in the power of man to improve this uniformity of flow to any important degree."

"That is just exactly my opinion.

"Q. I call your attention to this language: 'The uniformity of flow in that river is essential to the best interests of navigation of the river itself.'

"A. Yes.

"Q. Now, if you could improve on the uniformity of that flow it would be a good thing?

"A. It would be, if you could.

"Q. Such a dam as you have suggested, properly arranged with proper gates, do you say that that uniformity could not to some extent be increased?

"A. I think that the chances are that the men that tried to do it instead of improving the job would make a failure of it, and would do worse than the Creator has" (pp. 885–6).

Further examination in behalf of petitioner:

"At present I think it is advisable to lower the level of Lake Superior and raise the level of Lake Michigan. It will be for two years, so as to help out the lakes below. Lake Michigan has been lower, and we have been maintaining Lake Superior at a relatively higher level than Lake Michigan.

"We have got more water on our upper miter sill than on our lower miter sill, and it would be for the benefit of navigation if the two were equalized. A boat going to Duluth is equalized by that lock that it goes through. It would be more beneficial to navigation if we had three inches more on the lower miter sill and could lose quite a little on our upper miter sill so as to equalize results.

"The Chicago Drainage Canal is now running out of Lake Michigan 7,000 cubic feet a second. It is three or four months before the discharge of ten or twelve thousand cubic feet from Lake Superior is appreciable by measurement in Lake Michigan.

"If you have a flow of 10,000 cubic feet, to get its full effect it takes fully five years. Lakes Michigan and Huron are practically one lake, and are larger than Lake Superior (pp. 886–7).

"Q. (By the Court.) Colonel Townsend, supposing that the works—the water power works—were built as has been suggested, with a dyke along, or approximately along, the international boundary line, and later the Canadian authorities should determine to remove their compensating works and excavate a dam on their side, what would happen to the power house?

"A. In my judgment, that is regulated by international agreement. We would have each nation dredging and damming to utilize the water power and fighting one another, so that there would be great confusion, and no one would know what water they were getting. I think that has got to be settled by an international agreement—how much water should be used.

"Q. What was in my mind was whether, in the absence of any law or agreement restricting what should be done on the Canadian side, anybody could tell what they had on the United States side?

"A. Both Governments, without there was some agreement between them—the individuals could dig channels of indefinite size without being stopped by the Government, and either one or the other take all the power.

"Q. Each side might successfully destroy the power on the other side?

"A. Yes, sir; but the Government will never consent to that. There is an international treaty, and the two Governments are now working perfectly in harmony in maintaining the levels in these lakes, and they will not permit any such action.

"Q. Is there at present—perhaps counsel know or you do—any treaty covering that subject?

"A. There is a treaty which was passed within a year, a treaty in regard to that very question" (p. 888).

JOHN BOGART recalled for further cross-examination:

"When I stated the expense of bringing the Chandler-Dunbar water power to the millseat, I included the expense of a cross-dam with openings in it to supply water to the head.

"I saw the plans presented by the engineers who testified in behalf of the Chandler-Dunbar Water Power Company. If the power house formed a dam, that would eliminate the expense of the cross-dam. Those plans showed an engineer's method of building a power house which would operate as a dam (pp. 890–1).

"I think the methods of building the power houses as presented in the plans of Orbison and Wallace are practicable" (p. 891).

FRANCIS C. SHENEHON was here called as a witness for the petitioner, and testified that he was a dean of the College of Engineering in the University of Minnesota, and that he was at the Sault in private practice as an engineer from 1888 to 1891. That he was engaged on the Poe Lock and in the United States Lake Survey, river gaging until 1898, and in 1898 went to Buffalo as engineer for the Deep Waterways Commission to make hydraulic investigations of the Niagara River, and remained there until the fall of 1902, and was later on the surveys of the Great Lakes for navigation in 1906. Charged with investigation of Niagara Falls with a view to preserving the scenic grandeur of the Falls.

"The volume of water available and to be used, in my judgment, in the development of a power plant at the Sault is 33,000 cubic second-feet (pp. 902–3). This for the American side.

"In my judgment, it is not practicable to equalize the flow. It would be practicable, perhaps, to nearly equalize the flow, but not to maintain the lake levels. The equalizing the flow and maintaining the lake levels are antagonistic (p. 904).

919 "The effective head on the Chandler-Dunbar property is, in my judgment, 8.01 feet (pp. 904–5).

"Q. How does the ice affect the production of power there, and affect the head?

"A. In the case of a development which gave not too rapid water in the head race, that is, between the bridge and the power house, you would expect some ice formation in the winter season and when the water is running through a tube or with a friction on the top and bottom, it would consume more head in the head race; that, however, doesn't enter into this consideration.

"Q. For the flow and the head which you have already given as the basis of development, what is the theoretical horsepower on the Chandler-Dunbar property?

"A. 30,360.

"Q. What is the horsepower on the switch-board?

"A. That would be 21,250 with a 70 per cent efficiency on the switch-board.

"Q. Is that the per cent you figure, the 70 per cent?

"A. 70, yes.

"Q. You may state to the court as to how you regard this as a water power proposition.

"A. It has many elements I should say of excellence as a water power proposition, it has what might be regarded as a very uniform flow, perhaps fairly is a weak word in that respect. It has this great reservoir Lake Superior back of it, the rock foundations, or the rock Potsdam sandstone over which the water flows, there could be no beter foundation for your dam, your works to be erected. The two things that are against the power, of the low head first and the unreliability due to the use of the power as a possible controlling works.

"Q. You mean the question of Government control?

"A. I should say that this water power becoming trivial when considered in relation to the greater interests of navigation, and therefore the control of Lake Superior and even to some extent the passing of water down at the expense of Lake Superior to the lower lakes in time of need as at the present time, must be at the expense of the water power, therefore an unreliability comes in that is hurtful to the power.

"Q. That is, the regulation by the Government of the level of the lakes may be at the expense of developing power?

"A. Yes, that is a matter of fact. The Michigan-Lake Superior Company, I believe shut-downs there have occurred (pp. 905–6).

"Q. Turning to the volume that you spoke of, the Hydro-Electric Commission's report, I ask you to read into the record the statement with reference to the cost to the Michigan-Lake Superior Power Company on account of the shut-down.

"A. This is the Hydro-Electric Power Commission of the Province of Ontario, report ending October 31st, 1909, page 156, and I read from the first paragraph:

"'In the Lake Superior Power Company's charter is a clause designed to hold them responsible to both Federal Governments for the level of the water in the locks, which must at all times be held at or above a certain specified elevation. There are at present five channels through which the waters of Lake Superior can discharge, namely: The natural channel of St. Mary River, the American Lock, the Canadian Lock, the American Power Canal, and the Canadian Power Canal. It is evident that when these channels are discharging freely, a large quantity of water in excess of the natural discharge is being drawn from Lake Superior, with a consequent reduction of water level in the locks. For this reason, the American authorities during the past winter ordered half the wheels in the American plant to be sult down, at a loss to the company said to be in the neighborhood of $8,000 per month. If these plants are to be kept operating at full load without detriment to the navigation interests, the free discharge of the main channel must be curtailed in such a manner as

to compensate for the water drawn from Lake Superior by the artificial channels which feed the power plants.

"'With this object in view the construction of a compensating wing-dam has been commenced on the Canadian shore, about 200 feet above the railway bridge. The two channels between the small islands have been blocked by the railway embankment, and the permanent works of the wing-dam extend from the extremity of this fall'" (pp. 914–15).

On cross-examination, he testified:

"I don't know that there was ever any drawing on Lake Superior for the raising of the levels in Lake Michigan before this time. But I fully acquiesce in doing it at the present time.

"The Detroit River commerce, which includes Lake Erie and reaches up into Lakes Huron and Michigan, as well as Lake Superior, is greater than the Lake Superior commerce alone. These lakes, Erie, Michigan, and Huron, are reaching a low stage that corresponds with the record low stage of 1895–'6. The effect of this low water on Lakes Michigan and Huron reaches up and lowers the water on the floor of the Poe Lock at Sault Ste. Marie, which is the critical point in the St. Marys River navigation. The low water in Lake Erie affects and the critical point is reached in the vicinity of Amherstberg, which affects practically all the Detroit River commerce, and for that reason, to draw Lake Superior down at the present time so that the draft on the upper miter sill of the Poe Lock is about the same as the draft on the lock floor, looks to me like good sense" (pp. 923–4).

L. C. SABIN recalled for the petitioner:

"I went to Sault Ste. Marie about twenty years ago and have lived there the greater part of the time since."

920 On his cross-examination he testified:

"Referring to the letter of May 3, 1907, sent by the Chandler-Dunbar Water Power Company to you, covering a quitclaim deed, the steel conduit referred to in that letter was extended beyond the width of the widened canal?

Company to you, covering a quitclaim deed, the steel conduit referred to in that letter was extended beyond the width of the widened canal?

"A. Not as a steel conduit, but something that took the place of it.

"The area which was to be filled is shown on the blue print. Land which we intended to use as a dumping ground. This map (29) represents fairly correctly the area which was actually filled. It is the area of land north of claims 95 and 96 and beyond the dock of the Chandler-Dunbar Company, a strip about 250 feet wide and perhaps a thousand feet long or more. That was used as a dumping ground. A part of it was filled in pursuance of that letter (p. 929).

"The Government never built the proper fill and grade that this letter required it to build. Instead of that we built a connection on the east side of the bridge. It was more easily built there, and that

letter contemplates, I believe, the construction of a new canal which would render the track useless (p. 930).

"To carry out the agreement of the Government, we were to maintain the track in its previous location on the east side of the bridge by shortening the curve enough so that that was fairly satisfactory to the Chandler-Dunbar Company. Since that time we have extended the embankment so as to improve conditions somewhat and permit a locomotive to come down (p. 931).

"Perhaps that strip that we filled covered 7 or 8 acres (p. 932).

"Worth $100 an acre without water rights.

"Q. Wasn't that expressly put there for the Chandler-Dunbar Water Power Company to have a place for warehouses and a railroad track?

"A. At one time that may have been considered. At the time it was actually put there I don't remember whether that was the view or not. I think that that may be said to have been put in for the special use of the Chandler-Dunbar Company (p. 933).

"This, as a matter of fact, was a dump we intended to make, and in my first report recommending the acceptance of this proposition I stated that we would in any case have to make such a dump, but perhaps not extended it so far east. I think we should not have extended it so far east had it not been requested (p. 934).

"I think the east part of that dump was constructed in the latter half of 1909 and 1910" (p. 935).

Professor WILLIAMS recalled by this respondent.

"I furnished the Government certain plans for proposed electric development of power on the Chandler-Dunbar Water Power Company's property at the Sault. I have copies. These are the copies. Two plans, 1 and 2" (pp. 937–8).

These plans offered in evidence (p. 939). Defendant's Ex. 28.

Respondent offered in evidence letter from Wm. Chandler to Major F. U. Farquhar, dated May 19, 1883, which was as follows:

"SAULT STE. MARIE, *May 19, 1883.*

"Major F. U. FARQUHAR,

"*Corps of Engineers, U. S. A., Detroit.*

"MAJOR: Referring to correspondence between Mr. E. S. Wheeler and yourself concerning a tract of land on the north side of the canal between it and the rapids, located by me with Porterfield scrip at the local land office at Marquette, Mich., June 3, 1880, and which is now pending on appeal before the Hon. Secretary of the Interior, I will submit the same proposition to you that I made verbally to your predecessor, Genl. Weitzel, regarding the terms upon which the United States could secure a title, providing the appeal proceedings are decided in my favor.

"1st. Should the United States wish to secure this tract of land for canal purposes, I will make deed to the same for any compensation

that you and Mr. Wheeler may, after an investigation of all the facts concerning my location of the same, deem just and equitable.

"2nd. Should the United States only desire the title to the lower end of the tract, I will deed that portion of it without compensation.

"The above is the same proposition made to Genl. Weitzel except that your name and Mr. Wheeler's are substituted for those of Genl. Weitzel and Mr. Nobles.

"Respectfully, "WM. CHANDLER."

This respondent offered in evidence Exhibit 29, being a blue print of the present plan of the Government works for water-power purposes at the rapids.

Here the proofs were closed.

Exhibits 1, 17, 21, 22, 29, 55, 69, and Plan A are on file in this case and are hereby referred to and made a part of this bill of exceptions and are to be attached hereto.

Also this respondent's exceptions to findings of fact formulated by the court, also this respondent's exceptions to the refusal of the judge to find facts as requested, also this respondent's exceptions to the conclusions of law formulated by the court, also exceptions to the rulings of the court on the requests of the respondent for con-
921 clusions of law, also the exceptions of this respondent to the ruling of the court respecting the conclusions of law requested by the petitioner, are on file and are hereby referred to and made a part of this bill of exceptions and are to be attached hereto.

The foregoing is a true bill of exceptions arising on trial of the issue between the petitioner and respondent, the Chandler-Dunbar Water Power Company, and between this respondent and its co-respondents named. Same contains all the evidence, both oral and documentary, relating to the questions of fact presented by this respondent's exceptions to findings of fact and requests for findings of fact and rulings thereon and exceptions to such rulings.

And especially such as relates to the following questions of fact, to-wit,

(a) The necessity for taking all the submerged lands and flow of water described in the petition, including the title thereto in fee.

(b) As to what, if any, unusual expense and contingencies the development for power wholly upon the submerged land would have carried.

(c) The frequency of increasing the outflow of Lake Superior for benefit of lower lakes.

(d) The desirability and feasibility of remedial or controlling works to regulate the outflow of Lake Superior and probable cost of same.

(e) Relating to the supposition that diversion of water through the Michigan-Lake Superior Power Company's canal was "not to diminish the flow of water through the rapids on the American side" and that said supposition was not entertained after 1902.

(f) Relating to the volume of water usable for power to be taken into consideration in fixing the amount of award for taking the same.

(g) The sufficiency of provisions of plans to pass ice in any conditions to be reasonably expected.

(h) Provisions in permits for revocation thereof.

(i) The capacity of the Michigan-Lake Superior Power Company's canal.

(j) Desire of United States and Canada for construction of controlling works, and desirability and feasibility of construction of same.

Same, when supplemented by the facts found in that behalf also contains all the evidence, both oral and documentary, relating to the ownership of Portage Street.

922 GENTLEMEN: Please take notice that you are herewith served with a proposed bill of exceptions of the respondent Chandler-Dunbar Water Power Company in the foregoing entitled action.

JOHN H. GOFF,
Attorney for Chandler-Dunbar Water Power Company, respondent.

To—

REEVES T. STRICKLAND,
Special Assistant Attorney General.
FRED C. WETMORE,
United States Attorney.
GRANT FELLOWS and
WILLIAM K. CLUTE,
Special Assistant United States Attorneys.
SHERMAN T. HANDY,
Attorney for the City of Sault Ste. Marie.
A. S. WEILL,
Attorney for the Real Estate Trust Company of Philadelphia.
KLEINHANS & KNAPPEN,
Attorneys for the United States Mortgage & Trust Company of New York.
LEO M. BUTZEL,
Attorney for the Michigan-Lake Superior Power Company.
STEVENSON, CARPENTER & BUTZEL,
Attorneys for Charles M. Brown and Charles D. Warren, as Receivers of the Michigan-Lake Superior Power Company.

923

(Indorsed:) In District Court for the Western District of Michigan, Northern Division. United States, petitioner, *vs.* Chandler-Dunbar Water Power Company et al., respondents. Proof of service. Filed May 6, 1912. Chas. L. Fitch, deputy clerk. J. H. Goff, atty. for Chandler-Dunbar Water Power Co.

In the District (formerly Circuit) Court of the United States of America for the Western District of Michigan, Northern Division.

UNITED STATES OF AMERICA petitioner,
vs.
THE CHANDLER-DUNBAR WATER POWER COMPANY, respondent, plaintiff in error, impleaded with the Edison Sault Electric Company, St. Marys Power Company, the Sault Ste. Marie Bridge Company, the city of Sault Ste. Marie, William Chandler, Harris T. Dunbar, the Standard Trust Company of New York, the Michigan-Lake Superior Power Company (Charles D. Warren and Clarence M. Brown as receivers of said company), Real Estate Trust Company of Philadelphia, the United States Mortgage and Trust Company, respondents.

In the matter of the condemnation of all lands and property of every kind and description north of the present Saint Marys Falls Ship Canal throughout its entire length and lying between said ship canal and the international boundary line at Sault Ste. Marie, in the State of Michigan.

Due personal service is this day hereby admitted by the undersigned, of the assignment of errors of the Chandler-Dunbar Water Power Co., in the above-entitled cause.

July 16, 1912.

LEO. M. BUTZEL,
Attorney for Clarence M. Brown, receiver of Michigan-Lake Superior Power Company.
STEVENSON, CARPENTER & BUTZEL,
Attorneys for St. Marys Power Company.

(Indorsed:) Original. No. 638. United States of America. In the District (formerly Circuit) Court of the United States of America for the Western District of Michigan, Northern Division. United States of America, petitioner, *vs.* the Chandler-Dunbar Water Power Company, respondent, impleaded with the Edison Sault Electric Company et al. Admission of service of assignment of errors. Filed July 25, 1912. Fred J. Schultheis, dep. clerk. John H. Goff (Detroit, Michigan), attorney for the Chandler-Dunbar Water Power Company, respondent. Moses Hooper (Oshkosh, Wis.) and A. B. Eldredge (Marquette, Mich.), of counsel.

925 UNITED STATES OF AMERICA.

In the District (formerly Circuit) Court of the United States of America for the Western District of Michigan, Northern Division.

UNITED STATES OF AMERICA, PETITIONER,
vs.
THE CHANDLER-DUNBAR WATER POWER COMPANY, RESPONDENT, plaintiff in error, impleaded with the Edison Sault Electric Company, St. Marys Power Company, the Sault Ste. Marie Bridge Company, the City of Sault Ste. Marie, William Chandler, Harris T. Dunbar, the Standard Trust Company of New York, the Michigan Lake Superior Power Company (Charles D. Warren and Clarence M. Brown as receivers of said company), Real Estate Trust Company of Philadelphia, the United States Mortgage and Trust Company, respondents.

In the matter of the condemnation of all lands and property of every kind and description north of the present Saint Marys Falls Ship Canal throughout its entire length and lying between said ship canal and the international boundary line at Sault Ste. Marie, in the State of Michigan.

On behalf of the United States of America, we hereby, this 26th day of July, 1912, accept and admit due personal service of the writ of error issued in the above-entitled cause, in which writ of error the Chandler-Dunbar Water Power Company, a respondent, is plaintiff in error, and which writ is returnable August 7, 1912.

R. T. STRICKLAND,
Special Asst. Atty. Genl.
F. C. WETMORE,
U. S. Atty.
GRANT FELLOWS &
WM. K. CLUTE,
Special Asst. U. S. Attys. for the United States of America.

(Indorsed:) No. 638. United States of America. In the District (formerly Circuit) Court of the United States of America for the Western District of Michigan, Northern Division. United States of America, petitioner, vs. the Chandler-Dunbar Water Power Company, respondent, impleaded with the Edison Sault Electric Company et al. Admission of service of writ of error. Filed July 30, 1912. Fred J. Schultheis, dep. clerk. John H. Goff (Detroit, Mich.), attorney for the Chandler-Dunbar Water Power Company, respondent. Moses Hooper (Oshkosh, Wis.) and A. B. Eldredge (Marquette, Mich.), of counsel.

926 UNITED STATES OF AMERICA.

In the District (formerly Circuit) Court of the United States of America for the Western District of Michigan, Northern Division.

UNITED STATES OF AMERICA, PETITIONER,
vs.
THE CHANDLER-DUNBAR WATER POWER COMPANY, respondent, plaintiff in error, impleaded with the Edison Sault Electric Company, St. Marys Power Company, the Sault Ste. Marie Bridge Company, the City of Sault Ste. Marie, William Chandler, Harris T. Dunbar, the Standard Trust Company of New York, the Michigan Lake Superior Power Company (Charles D. Warren and Clarence M. Brown as receivers of said company), Real Estate Trust Company of Philadelphia, the United States Mortgage and Trust Company, respondents.

In the matter of the condemnation of all lands and property, of every kind and description, north of the present Saint Marys Falls Ship Canal throughout its entire length and lying between said ship canal and the international boundary line at Sault Ste. Marie, in the State of Michigan.

To the clerk of the United States District Court for the Western District of Michigan, Northern Division:

In addition to the list of papers and records mentioned in the filed præcipe of counsel for the United States to be returned in your transcript in said cause, I desire to be included the following papers and records:

1. Requests of counsel of Chandler-Dunbar Water Power Company for findings or conclusions of law.
2. Specific requests of counsel of Chandler-Dunbar Water Power Company for conclusions of law.

927 3. Exceptions of Chandler-Dunbar Water Power Company to findings of fact and to conclusions of law, and to granting certain requests of petitioner for findings of law and fact, and to refusal to grant requests of the Chandler-Dunbar Water Power Company for findings of fact and conclusions of law.

4. Petition of Chandler-Dunbar Water Power Company for writ of error and order allowing same and writ of error.
5. This præcipe.
6. Citation and proof or acknowledgment of service.
7. Assignment of errors of Chandler-Dunbar Water Power Company.
8. Proof of service of assignment of errors.

9. Bond of Chandler-Dunbar Water Power Company lately filed with petition for writ of error.

Dated July 5, 1912.

J. H. GOFF,
Attorney for Respondent Chandler-Dunbar Water Power Company.

(Indorsed:) No. 638. United States of America. In the District (formerly Circuit) Court of the United States of America, for the Western District of Michigan, Northern Division. United States of America, petitioner, vs. The Chandler-Dunbar Water Power Company, respondent, plaintiff in error, impleaded with the Edison Sault Electric Company et al. Præcipe of Chandler-Dunbar Co. Filed July 6, 1912. Fred J. Schultheis, dep. clerk. John H. Goff, attorney for the Chandler-Dunbar Water Power Company, respondent. Moses Hooper and A. B. Eldredge, of counsel.

929 Know all men by these presents that we, the Chandler-Dunbar Water Power Company, a Michigan corporation, as principal, and William Chandler, as surety, are held and firmly bound unto the United States of America, in the full and just sum of one thousand ($1,000.00) dollars, to be paid to the said United States of America, its certain attorneys or assigns; to which payment well and truly to be made, we bind ourselves, our heirs, executors, and administrators jointly and severally by these presents.

Sealed with our seals, and dated this 22nd day of June in the year of our Lord one thousand nine hundred and twelve.

Whereas, lately, at a Circuit Court of the United States, in a suit depending in said court, between the United States of America, petitioner, and the Chandler-Dunbar Water Power Company, respondent, impleaded with the Edison Sault Electric Company, St. Marys Power Company, the Sault Ste. Marie Bridge Company, the City of Sault Ste. Marie, William Chandler, Harris T. Dunbar, the Standard Trust Company of New York, the Michigan Lake Superior Power Company (Charles D. Warren and Clarence M. Brown, as receivers of said company), Real Estate Trust Company of Philadelphia, the United States Mortgage and Trust Company, a judgment was rendered in favor of the said respondent, the Chandler-Dunbar Water Power Company, and the said Chandler-Dunbar Water Power Company, having obtained a writ of error and filed a copy thereof in the clerk's office of the said court, to reverse the judgment in the aforesaid suit, and a citation directed to the said United States of America, citing and admonishing it to be and appear at a session of the Supreme Court of the United States, to be holden at the city of Washington.

930 Now, the condition of the above obligation is such that if the said the Chandler-Dunbar Water Power Company shall prosecute said writ of error to effect, and answer all damages and costs if

it fail to make its plea good, then the above obligation to be void, else to remain in full force and virtue.

THE CHANDLER-DUNBAR WATER POWER CO.,
By WM. CHANDLER, *President.* [L. S.]
WM. CHANDLER. [SEAL.]

Sealed and delivered in presence of—
FRANK R. WARNER,
H. B. McMAHON.
Approved by—

C. W. SESSIONS, *District Judge.*

UNITED STATES OF AMERICA.

In the District Court of the United States for the Western District of Michigan, Northern Division.

STATE OF MICHIGAN,
County of Chippewa, ss:

WILLIAM CHANDLER, the surety in the foregoing bond, being duly sworn, says that he is worth the amount of the penalty in said bond over and above all debts and legal exemptions, in real estate situated in said district.

WM. CHANDLER.

Subscribed and sworn to before me this 22 day of June, A. D. 1912.
FRANK R. WARNER,
Notary Public, Chippewa County, Michigan.
My commission expires May 19, 1913.

[SEAL.]

(Endorsed:) No. 638. In the District (formerly Circuit) Court of the United States of America for the Western District of Michigan, Northern Division. United States of America, petitioner, vs. Chandler-Dunbar Water Power Company, respondent, impleaded with the Edison Sault Electric Company et al. Bond in error. Filed June 27, 1912. Fred J. Schultheis, dep. clerk. John H. Goff (Detroit, Mich.), attorney for the Chandler-Dunbar Water Power Company, respondent. Moses Hooper (Oshkosh, Wisconsin) and A. B. Eldredge (Marquette, Michigan), of counsel.

931 In the District (formerly Circuit) Court of the United States of America for the Western District of Michigan, Northern Division.

UNITED STATES OF AMERICA, PETITIONER, vs. ST. MARYS POWER COMPANY, RESPONDENT, plaintiff in error, impleaded with the Edison Sault Electric Company, the Chandler-Dunbar Water Power Company, the Sault Ste. Marie Bridge Company, the City of Sault Ste. Marie, William Chandler, Harris T. Dunbar, the Standard Trust Company of New York, the Michigan Lake Superior Power Company (Charles D. Warren and Clarence M. Brown as receivers of said company), the Real Estate Trust Company of Philadelphia, the United States Mortgage & Trust Company, respondents.	No. 638. At law. Petition for writ of error.

In the matter of the condemnation of all lands and property of every kind and description north of the present Saint Marys Falls Ship Canal throughout its entire length and lying between said ship canal and the international boundary line at Sault Ste. Marie, in the State of Michigan.

Now comes the St. Marys Power Company, respondent herein, and says:

That on or about the 29th day of December, A. D. 1911, the
932 circuit court aforesaid entered a judgment herein in favor of this respondent and against the petitioner, in which judgment and the proceedings had prior thereto in this case, certain errors were committed to the prejudice of this respondent, all of which will more in detail appear from the assignment of errors which is filed with this petition.

Wherefore, this respondent prays that a writ of error may issue in this behalf out of the Supreme Court of the United States for the correction of error so complained of and that a transcript of the record, proceedings, and papers in this case, duly authenticated, may be sent to the Supreme Court of the United States.

STEVENSON, CARPENTER & BUTZEL,
Attorneys for Respondent, St. Mary's Power Company.

933 (Indorsed:) No. 638. United States of America. In the District (formerly Circuit) Court of the United States of America for the Western District of Michigan, Northern Division. United States of America, petitioner, vs. St. Marys Power Company, respondent, plaintiff in error, impleaded with the Edison Sault Electric Company et al. Petition for writ of error. Stevenson, Car-

penter & Butzel, attorneys for St. Marys Power Company, respondent, 1324 Ford Bldg., Detroit. Filed Jul. 3, 1912. Chas. L. Fitch, deputy clerk.

934 In the District (formerly Circuit) Court of the United States of America for the Western District of Michigan, Northern Division.

UNITED STATES OF AMERICA, PETITIONER,
vs.
THE ST. MARYS POWER COMPANY, RESPONDENT, impleaded with the Edison Sault Electric Company, the Chandler-Dunbar Water Power Company, the Sault Ste. Marie Bridge Company, the city of Sault Ste. Marie, William Chandler, Harris T. Dunbar, the Standard Trust Company of New York, the Michigan Lake Superior Power Company (Charles D. Warren and Clarence M. Brown as receivers of said company), Real Estate Trust Company of Philadelphia, the United States Mortgage & Trust Company, respondents.

No. 638. At law.

On this 3rd day of July, A. D. 1912, comes the respondent, St. Marys Power Company, by its attorney, and files herein and presents to the court its petition praying for the allowance of a writ of error and an assignment of errors intended to be urged by it, praying also that a transcript of the record and proceedings and papers upon which the judgment herein was rendered, duly authenticated, may be sent to the Supreme Court of the United States, and that such other and further proceedings may be had as are proper in the premises.

935 On consideration whereof the court does allow the writ of error upon the respondent's giving bond according to law in the sum of five hundred dollars.

C. W. SESSIONS,
District Judge.

936 (Indorsed:) No. 638. In the District Court (formerly Circuit) of the United States of America for the Western District of Michigan, Northern Division. United States of America, petitioner, vs. St. Marys Power Company, respondent, impleaded with the Edison Sault Electric Company et al., respondents. Order allowing writ of error. Stevenson, Carpenter & Butzel, attorneys for St. Marys Power Company, respondent, 1324 Ford Bldg., Detroit, Mich. Filed Jul. 3, 1912. Chas L. Fitch, deputy clerk.

937 THE UNITED STATES OF AMERICA, *ss:*

The President of the United States of America, to the judge of the District Court of the United States for the Western District of Michigan, Northern Division, Greeting:

Because in the records and proceedings, and also in the rendition of the judgment of a plea which is in the said District Court, before you, between the United States of American, petitioner, and the St. Marys Power Company, respondent, impleaded with the Edison Sault Electric Company, the Chandler-Dunbar Water Power Company, the Sault Ste. Marie Bridge Company, the City of Sault Ste. Marie, William Chandler, Harris T. Dunbar, the Standard Trust Company of New York, the Michigan Lake Superior Power Company (Charles D. Warren and Clarence M. Brown, as receivers of said company), Real Estate Trust Company of Philadelphia, the United States Mortgage & Trust Company, respondents, in the matter of the condemnation of all lands and property of every kind and description north of the present Saint Marys Falls Ship Canal throughout its entire length and lying between said ship canal and the international boundary line at Sault Ste. Marie, in the State of Michigan, a manifest error has happened, to the great damage of the St. Marys Power Company, as by its complaint appears. We being willing that the error, if any has been, should be duly corrected, and full and speedy justice done to the parties aforesaid in this behalf, do command you, if judgment therein be given, that under your seal, distinctly and openly, you send the record and proceedings aforesaid, with all things concerning the same, to the Supreme Court of
938 the United States, together with this writ, so that you may have the same at the city of Washington, on the 10th day of August next, in the said Supreme Court, to be then and there held, that the record and proceedings aforesaid being inspected, the said Supreme Court may cause further to be done to correct that error, what of right, and according to the laws and customs of the United States shall be done.

Witness the Honorable Edward D. White, Chief Justice of the United States, the 12th day of July, in the year of our Lord one thousand nine hundred and twelve, and of the Independence of the United States of America the one hundred and thirty-seventh.

[SEAL.] CHAS. H. POTTER,

Clerk of the District Court of the United States for the Western District of Michigan, Northern Division.

939 (Indorsed:) No. 638. United States of America. In the District (formerly Circuit) Court of the United States of America, for the Western District of Michigan, Northern Division. United States of America, petitioner, vs. St. Marys Power Company, respondent, impleaded with Edison Sault Electric Company et al. Writ of error. Stevenson, Carpenter & Butzel, Attorneys for St.

Marys Power Company, respondent, 1324 Ford Bldg., Detroit, Mich. Filed Jul. 12, 1912. Chas. L. Fitch, deputy clerk.

940 THE UNITED STATES OF AMERICA, *ss:*

The President of the United States of America, to the judge of the District Court of the United States for the Western District of Michigan, Northern Division, greeting:

Because in the records and proceedings, and also in the rendition of the judgment of a plea which is in the said District Court, before you between the United States of America, petitioner, and the St. Marys Power Company, respondent, impleaded with the Edison Sault Electric Company, the Chandler-Dunbar Water Power Company, the Sault Ste. Marie Bridge Company, the City of Sault Ste. Marie, William Chandler, Harris T. Dunbar, the Standard Trust Company of New York, the Michigan-Lake Superior Power Company (Charles D. Warren and Clarence M. Brown as receivers of said company), Real Estate Trust Company of Philadelphia, the United States Mortgage & Trust Company, respondents, in the matter of the condemnation of all lands and property of every kind and description north of the present Saint Marys Falls Ship Canal throughout its entire length and lying between said ship canal and the international boundary line at Sault Ste Marie, in the State of Michigan, a manifest error has happened, to the great damage of the St. Marys Power Company, as by its complaint appears. We being willing that the error, if any has been, should be duly corrected, and full and speedy justice done to the parties aforesaid in this behalf, do command you, if judgment therein be given,

941 that under your seal distinctly and openly, you send the record and proceedings aforesaid, with all things concerning the same, to the Supreme Court of the United States, together with this writ, so that you may have the same at the city of Washington on the 10th day of August next, in the said Supreme Court, to be then and there held, that the record and proceedings aforesaid being inspected, the said Supreme Court may cause further to be done to correct that error, what of right, and according to the laws and customs of the United States shall be done.

Witness the honorable Edward D. White, Chief Justice of the United States, the 12th day of July, in the year of our Lord one thousand nine hundred and twelve, and of the independence of the United States of America the one hundred and thirty-seventh.

[SEAL.] (Sd.) CHAS. J. POTTER,
Clerk of the District Court of the United States for the Western District of Michigan, Northern Division.

(Indorsed:) No. 638. United States of America. In the District Court (formerly Circuit) of the United States of America for the Western District of Michigan, Northern Division. United States of America, petitioner, vs. St. Marys Power Company, respondent, impleaded with Edison Sault Electric Company et al. Copy of

writ of error. Deposited for defendants in error July 12, 1912. Chas. L. Fitch, deputy clerk. Stevenson, Carpenter & Butzel, attorneys for St. Marys Power Company, respondent, 1324 Ford Building, Detroit, Mich.

942 District Court of the United States for the Western District of Michigan, Northern Division.

No. 638.

In the matter of the condemnation of all the lands north of the St. Marys Fall Ship Canal to the international boundary.

Assignments of error.

And now comes the St. Marys Power Company, by Stevenson, Carpenter & Butzel, its attorneys, and says that upon the record, proceedings, and trial of the said cause and the findings of fact and law, and in giving of the judgment and making the final award there is manifest error to the prejudice of the St. Marys Power Company, and for error assigns the following:

First. The court erred in refusing to conclude and find as matter of law as requested by said respondent in its first request, viz:

"In determining the value to be assigned to Island No. 5 in view of the natural conditions presented, the value of the water power should be determined as a unit proposition, and therefore Island No. 5 is entitled to that proportion of value which the fall in front of Island No. 5 bears to the total fall."

943 Second. The court erred in refusing to conclude and find as a matter of law as requested by said respondent in its fifth request, viz:

"The United States is not entitled simply by virtue of the ownership of the intervening land between the Chandler-Dunbar properties and those of the St. Marys Company, namely, Island No. 5, to act arbitrarily in refusing to join in a development of the falls as a unit."

Third. The court erred in concluding and finding as a matter of law as concluded and found in conclusion of law thirty-seven, viz:

"The fact that the United States before commencing its proceeding made an offer to the St. Marys Power Company for Island No. 5, and on its refusal made the St. Marys Power Company a respondent to this proceeding does not estop the United States from continuing to claim in the pending ejectment suit that it is the owner of the island. The compensation awarded for this island and its appurtenant rights should be paid into court, there to await the determination of the title."

Fourth. The court erred in concluding and finding as a matter of law as concluded and found in conclusion of law thirty-nine, viz:

"The fact that there is intervening ownership between the fall of the Chandler-Dunbar Company and the fall of Island No. 5 makes it improper to award compensation for the water power appurtenant to Island No. 5 wholly upon the basis of its percentage of the total fall of the two riparian proprietors added together."

Fifth. The court erred in concluding and finding as a matter of law as concluded and found in conclusion of law forty, viz:

944 "In the absence of any appropriation by the owners of Island No. 5 of any of the water flowing by there is no sufficient evidence that any of such water is surplus water beyond need in aid of navigation and the owners of such island are entitled to no compensation whatever directly on account of water power."

Sixth. The court erred in concluding and finding as a matter of law as concluded and found in conclusion of law forty-two, viz:

"The 6,500 horsepower for which compensation is awarded to the Chandler-Dunbar Company is not affected by any rights claimed by the Michigan Lake Superior Power Company and the latter company has no interest whatever in such 6,500 horsepower or in the compensation awarded therefor."

Seventh. The court erred in refusing to grant said respondent's request for finding of fact number one.

Eighth. The court erred in refusing to grant said respondent's request for finding of fact number two.

Ninth. The court erred in refusing to grant said respondent's request for finding of fact number three.

Tenth. The court erred in refusing to grant said respondent's request for finding of fact number four.

Eleventh. The court erred in refusing to grant said respondent's request for finding of fact number five.

945 Twelfth. The court erred in refusing to grant said respondent's request for finding of fact number six.

Thirteenth. The court erred in refusing to grant said respondent's request for finding of fact number seven.

Fourteenth. The court erred in refusing to grant said respondent's request for finding of fact number eight.

Fifteenth. The court erred in refusing to grant said respondent's request for finding of fact number nine.

Sixteenth. The court erred in refusing to grant said respondent's request for finding of fact number ten.

Seventeenth. The court erred in refusing to grant said respondent's request for finding of fact number eleven.

Eighteenth. The court erred in refusing to grant said respondent's request for finding of fact number twelve.

Nineteenth. The court erred in refusing to grant said respondent's request for finding of fact number thirteen.

Twentieth. The court erred in refusing to grant said respondent's request for finding of fact number fourteen.

Twenty-first. The court erred in concluding and finding the following, being part of finding of fact number twenty-four, viz:

"During part of every year during recent years the United States engineers have wholly stopped the flow of water through the Michigan Lake Superior Canal, thus greatly lessening its value as a power producer."

946 Twenty-second. The court erred in concluding and finding the following, being part of finding of fact number seventy, viz:

"(d) If it should be held that the riparian owners are entitled to compensation for water power above the 4,000 c. s. f. estimate and above the 6,500 c. s. f. allowance, then the value of such excess water power appurtenant to Island No. 5 is ten per cent of that to be fixed for the similar rights of the Chandler-Dunbar Company."

Twenty-third. The court erred in concluding and finding as a matter of law as concluded and found in the following conclusion announced by him:

"The COURT. From the view taken of the facts, and which will be specified in the findings to be filed, it follows as a matter of law that the compensation for the property rights described in the petition should be fixed as follows:

* * * * * * *

(b) To St. Marys Falls Power Company, $21,000. * * *"

Twenty-fourth. The court erred in refusing to award respondent St. Marys Power Company more than twenty-one thousand dollars ($21,000).

Wherefore, respondent prays that the judgment of the Circuit (now District) Court for the Western District of Michigan, Northern Division, may be reversed.

STEVENSON, CARPENTER & BUTZEL,
Attorneys for St. Marys Power Company.

947 (Indorsed:) No. 638. District Court of the United States for the Western District of Michigan, Northern Division. In the matter of the condemnation of all the lands north of the St. Marys Falls Ship Canal to the international boundary. Assignments of error. Filed July 3, 1912. Chas. L. Fitch, deputy clerk. Stevenson, Carpenter & Butzel, attorneys for St. Marys Power Company, respondent, 1324 Ford Bldg., Detroit, Mich.

948 In the District Court of the United States for the Western District of Michigan, Northern Division.

No. 638.

In the matter of the condemnation of all the lands north of the St. Marys Falls Ship Canal to the international boundary.

STATE OF MICHIGAN,
County of Wayne, ss:

JOSEPH S. MCDOWELL, being duly sworn, deposes and says that on the fifteenth day of July, 1912, at the city of Detroit, he served a true copy of the citation to which this affidavit is attached upon William

K. Clute, special United States attorney and one of the attorneys for petitioner in the above matter, by inclosing the same in a suitable envelope, upon which the postage was prepaid, and depositing the same in the post office at the city of Detroit, addressed to said William K. Clute, Grand Rapids, Michigan, that being the business address of said William K. Clute to deponent's best knowledge, information and belief. That service of same has been duly acknowledged by said William K. Clute.

Further deponent says not.

JOSEPH S. MCDOWELL.

Subscribed and sworn to before me this 18th day of July, 1912.

SAMUEL R. WILLIAMS.
Notary Public, Wayne County, Michigan.

My commission expires March 5, 1915.

949 THE UNITED STATES OF AMERICA, *ss:*

To the United States of America, greeting:

You are hereby cited and admonished to be and appear at a Supreme Court of the United States to be holden at Washington within thirty days from the date hereof, pursuant to a writ of error filed in the clerk's office of the District Court for the Western District of Michigan, Northern Division, wherein the St. Marys Power Company, respondent, is plaintiff in error, and was impleaded with the Edison Sault Electric Company, Chandler-Dunbar Water Power Company, the Sault Ste. Marie Bridge Company, the City of Sault Ste. Marie, William Chandler, Harris T. Dunbar, the Standard Trust Company of New York, the Michigan Lake Superior Power Company (Charles D. Warren and Clarence M. Brown, as receivers of said company), Real Estate Trust Company of Philadelphia, the United States Mortgage & Trust Company, respondents, in the matter of the condemnation of all lands and property of every kind and description north of the present Saint Marys Falls Ship Canal and the international boundary line at Sault Ste. Marie, in the State of Michigan, and wherein you are defendant in error, to show cause, if any there be, why the judgment and award rendered in favor of said plaintiff in error, as in the said writ mentioned, should not be corrected, and why speedy justice should not be done to the parties in that behalf.

950 Witness the Honorable Clarence W. Sessions, district judge for the Western District of Michigan, this 12th day of July, A. D. 1912.

C. W. SESSIONS,
District Judge.

951

(Indorsed:) No. 638. In the District Court of the United States for the Western District of Michigan, Northern Division. United States of America, petitioner, vs. St. Marys Power Company, re-

spondent, plaintiff in error, impleaded with the Edison Sault Electric Company et al. Citation. Filed July 20, 1912. Fred J. Schultheis, dep. clerk. Stevenson, Carpenter & Butzel, attorneys for St. Marys Power Company, respondent, 1324 Ford Bldg., Detroit, Mich.

952 In the District Court of the United States for the Western District of Michigan, Northern Division.

No. 638.

In the matter of the condemnation of all the lands north of the St. Marys Falls Ship Canal to the international boundary.

I hereby acknowledge due and timely service of copy of assignments of error of the St. Marys Power Company and of Clarence M. Brown, as receiver of the Michigan Lake Superior Power Company, filed in this cause.

I further acknowledge due and timely service of a copy of the praecipe and notice filed by the St. Marys Power Company and by Clarence M. Brown, receiver of the Michigan Lake Superior Power Company, with the clerk of this court for the making up of the record on said appeal.

July 19, 1912.

J. H. GOFF,
Attorney for Chandler-Dunbar Water Power Company.

953

954 In the District Court of the United States for the Western District of Michigan, Northern Division.

No. 638.

In the matter of the condemnation of all the lands north of the St. Marys Falls Ship Canal to the international boundary.

STATE OF MICHIGAN,
County of Wayne, ss:

JOSEPH S. MCDOWELL, being duly sworn, deposes and says that on the 9th day of July, A. D. 1912, he served true copies of the assignments of error filed in this cause by the St. Marys Power Company and by Clarence M. Brown, receiver for the Michigan Lake Superior Power Company, upon Kleinhans & Knappen, attorneys for the United States Mortgage and Trust Company; A. S. Weill, attorney for the Real Estate Mortgage and Trust Company; and William K. Clute, special assistant United States attorney; by enclosing the same in suitable envelopes addressed to the said Kleinhans & Knappen, at the city of Grand Rapids, Michigan; to the said A. S. Weill, at the city of Philadelphia, Pennsylvania; and the said William K. Clute, at the city of Grand Rapids, Michigan, those being the business addresses of said attorneys to the best of deponent's

knowledge, information, and belief; that the copies of the assignments of error so served were true and exact copies of the
955 assignments of error now on file in this cause.

Further deponent says not.

JOSEPH S. MCDOWELL.

Subscribed and sworn to before me this 18th day of July, 1912.

SAMUEL R. WILLIAMS,
Notary Public, Wayne County, Michigan.

My commission expires Mar. 5, 1915.

956

(Indorsed:) No. 638. District Court of United States for the Western District of Michigan, Northern Division. In the matter of the condemnation of all of the lands of St. Marys Falls Ship Canal to the international boundary. Proof of service of copies of assignments of error of St. Marys Power Company and of Clarence M. Brown, receiver. Filed July 20, 1912. Fred J. Schultheis, deputy clerk.

957 Know all men by these presents, that we, the St. Marys Power Company, a corporation organized and existing under and by virtue of the laws of the State of Michigan, as principal, and the Equitable Surety Company, a corporation organized and existing under the laws of the State of Missouri, duly authorized to act as surety within the State of Michigan, are held and firmly bound unto the United States of America in the full and just sum of five hundred dollars ($500), to be paid to the said United States of America, its certain attorneys or representatives, to which payment well and truly to be made we bind ourselves, or successors and assigns, jointly and severally by these presents.

Sealed with our seals and dated this third day of July, in the year of our Lord one thousand nine hundred and twelve.

Whereas lately, at the Circuit (now District) Court of the United States for the Western District of Michigan, Northern Division, on the twenty-ninth day of December, A. D. 1911, in a suit pending in said court between the United States of America, as petitioner, and the said St. Marys Power Company, respondent, impleaded with the Edison Sault Electric Company, the Chandler-Dunbar Water Power Company, the Sault Ste. Marie Bridge Company, the city of Sault Ste. Marie, William Chandler, Harris T. Dunbar, the Standard Trust Company of New York, the Michigan Lake Superior Power Company (Charles D. Warren and Clarence M. Brown, as receivers of said company), Real Estate Trust Company of Philadelphia, the United States Mortgage & Trust Company, respondents, in the matter of the condemnation of all lands and property of every kind and description north of the present Saint Marys Falls Ship Canal throughout its entire length and lying between said ship canal
958 and the international boundary line at Sault Ste. Marie, in the State of Michigan, a judgment was entered in favor of the said St. Marys Power Company and against the said United States

of America, in which judgment and proceedings had prior thereto in said case the said St. Marys Power Company claims that certain errors were committed to its prejudice, and has filed in the office of the clerk of said court its petition for writ of error, together with assignments of error intended to be urged by it, upon which an order has been entered allowing the said writ of error to issue upon said respondent's giving bond, according to law, in the sum of five hundred dollars ($500), and a citation issued, directed to the said United States of America, citing and admonishing it to be and appear at a session of the Supreme Court of the United States to be holden at the city of Washington on the 10th day of August next.

Now, the condition of the above obligation is such that if the said St. Marys Power Company shall prosecute its appeal to effect and answer all damages and costs if it fail to make its plea good, then the above obligation to be void, else to remain in full force and virtue.

Signed, sealed, and delivered in presence of—

ST. MARYS POWER COMPANY,
By LEO M. BUTZEL,
Its Atty. in Fact.
EQUITABLE SURETY COMPANY,
By ROBERT J. WYNNE,
Attorney in Fact.

Countersigned:

C. A. KINSELLA, [SEAL.]
Attorney in Fact.

I hereby approve the foregoing bond.

C. W. SESSIONS,
July 12, 1912. *District Judge.*

959 (Endorsed:) No. 638. District Court of the United States for the Western District of Michigan, Northern Division. In the matter of the condemnation of all the lands north of the St. Marys Falls Ship Canal to the international boundary. Bond on appeal. Filed Jul 12, 1912. Chas. L. Fitch, deputy clerk. Stevenson, Carpenter and Butzel, attys. for St. Marys Power Co., Ford Building, Detroit, Michigan.

960 In the District Court of the United States for the Western District of Michigan; Northern Division.

No. 638.

In the matter of the condemnation of all the lands north of the St. Marys Falls Ship Canal to the international boundary.

STATE OF MICHIGAN, *County of Wayne, ss:*

JOSEPH S. MCDOWELL, being duly sworn, deposes and says that on the ninth day of July, 1912, he served a copy of the notice and præcipe to which this affidavit is attached upon Kleinhans & Knappen, attorneys for the United States Mortgage and Trust Company, by placing the same in an envelope, upon which the postage was fully prepaid, addressed to said attorneys at the city of Grand

Rapids, State of Michigan, that being the business address of said attorneys, to the best of deponent's knowledge, information and belief; that on the said ninth day of July, 1912, he served a copy of said præcipe and notice upon A. S. Weill, attorney for the Real Estate Mortgage and Trust Company, by enclosing the same in a suitable envelope, upon which the postage was prepaid, and depositing the same in the post office at the city of Detroit, addressed to said A. S. Weill at the city of Philadelphia, Pennsylvania, that being the business address of said attorney to the best of deponent's knowledge, information and belief; that on the said ninth day of July,
961 1912, he served a copy of said præcipe and notice upon William K. Clute, special assistant United States attorney, by enclosing the same in an envelope, upon which the postage was fully prepaid, addressed to said William K. Clute at the city of Grand Rapids, Michigan, that being the business address of said attorney to the best of deponent's knowledge, information and belief; that the copies so served were true and exact copies of the præcipe and notice to which this affidavit is attached.

Further deponent says not.

JOSEPH S. MCDOWELL.

Subscribed and sworn to before me this 18th day of July, 1912.

SAMUEL R. WILLIAMS,
Notary Public, Wayne County, Michigan.

My commission expires Mar. 5, 1915.

962 United States District Court for the Western District of Michigan, Northern Division.

No. 638.

In the matter of the condemnation of all the lands north of the St. Marys Falls Ship Canal to the international boundary.

JOHN H. GOFF,
Attorney for the Chandler-Dunbar Water Power Co.,
Union Trust Bldg., Detroit, Mich.

KLEINHANS & KNAPPEN,
Attorneys for the U. S. Mortgage & Trust Co.,
Michigan Trust Bldg., Grand Rapids, Mich.

A. S. WEILL,
Attorney for the Real Estate Mortgage & Trust Co.,
Trustee, 1418 Land Title Bldg., Philadelphia.

GRANT FELLOWS and WILLIAM K. CLUTE,
Special Asst. U. S. Attorneys.

GENTLEMEN: You will please take notice that the præcipe to the clerk, a copy of which you are herewith served, has been filed in said cause with the clerk of the District Court for the Western District of Michigan, Northern Division.

Dated July 9th, 1912.

Respectfully, STEVENSON, CARPENTER & BUTZEL,
Attys. for St. Marys Power Co.

963 United States District Court for the Western District of Michigan, Northern Division.

No. 638.

In the matter of the condemnation of all the lands north of the St. Marys Falls Ship Canal to the international boundary.

To the clerk of the United States District Court for the Western District of Michigan, Northern Division:

Take notice that in making your return to the writ of error of the St. Marys Power Company which has been issued herein you will please include in the making up of the record and return the following list of papers and records in the cause, viz:

1. Request of respondent, St. Marys Power Company, for findings of law.
2. Petition for writ of error.
3. Order allowing writ of error.
4. Assignments of error.
5. Citation and proof of service.
6. Affidavit showing service of assignments of error.

STEVENSON, CARPENTER & BUTZEL,
Attys. for St. Marys Power Co.

964

(Indorsed:) No. 638. District Court of the United States for the Western District of Michigan, Northerin Division. In the matter of the condemnation of all the lands north of the St. Marys Falls Ship Canal to international boundary. Præcipe & notice. Filed July 20, 1912. Fred J. Schultheis, dep. clerk. Stevenson, Carpenter & Butzel, attys. for St. Marys Power Co.

965 In the District (formerly Circuit) Court of the United States of America for the Western District of Michigan, Northern Division.

UNITED STATES OF AMERICA, PETITIONER, *vs.* CLARENCE M. BROWN, SOLE RECEIVER OF MICHIGAN Lake Superior Power Company, respondent, plaintiff in error, impleaded with the Edison Sault Electric Company, the Chandler Dunbar Water Power Company, the Sault Ste. Marie Bridge Company, the city of Sault Ste. Marie, William Chandler, Harris T. Dunbar, the Standard Trust Company of New York, St. Marys Power Company, the Real Estate Trust Company of Philadelphia, the United States Mortgage & Trust Company, respondents.	No. 638. At law. Petition for writ of error.

In the matter of the condemnation of all lands and property of every kind and description north of the present Saint Marys Falls Ship Canal throughout its entire length and lying between said ship

canal and the international boundary line, at Sault Ste. Marie, in the State of Michigan.

Now comes Clarence M. Brown, sole receiver of the Michigan Lake Superior Power Company, respondent herein, and says:

That on or about the 29th day of December, A. D. 1911, the
966 circuit court aforesaid entered a judgment herein in favor of petitioner and against this respondent, in which judgment and the proceedings had prior thereto in this case certain errors were committed, to the prejudice of this respondent, all of which will more in detail appear from the assignment of errors which is filed with this petition.

Wherefore this respondent prays that a writ of error may issue in this behalf out of the Supreme Court of the United States for the correction of error so complained of, and that a transcript of the record, proceedings, and papers in this case, duly authenticated, may be sent to the Supreme Court of the United States.

GEO. M. BUTZEL,
Attorney for Respondent, Clarence M. Brown,
Sole Receiver of Michigan Lake Superior Power Company.

967

(Indorsed:) No. 638. United States of America. In the District (formerly Circuit) Court of the United States for the Western District of Michigan, Northern Division. United States of America, petitioner, vs. Clarence M. Brown, receiver of Michigan Lake Superior Power Company, respondent, plaintiff in error, impleaded with the Edison Sault Electric Company et al. Petition for writ of error. Filed Jul. 3, 1912. Chas. L. Fitch, deputy clerk. Leo M. Butzel, attorney for Clarence M. Brown, receiver Michigan Lake Superior Power Company, respondent, 1324 Ford Bldg., Detroit, Mich.

968 In the District (formerly Circuit) Court of the United States of America for the Western District of Michigan, Northern Division.

UNITED STATES OF AMERICA, PETITIONER, *vs.* CLARENCE M. BROWN, SOLE RECEIVER OF MICHIGAN Lake Superior Power Company, respondent, impleaded with the Edison Sault Electric Company, St. Marys Power Company, the Sault Ste. Marie Bridge Company, the city of Sault Ste. Marie, William Chandler, Harris T. Dunbar, the Standard Trust Company of New York, Real Estate Trust Company of Philadelphia, the United States Mortgage & Trust Company, respondents.	No. 638. At law.

This 3rd day of July, A. D. 1912, comes the respondent, Clarence M. Brown, sole receiver of Michigan Lake Superior Power Company,

by Leo M. Butzel, his attorney, and files herein and presents to the court his petition praying for the allowance of a writ of error, and an assignment of errors intended to be urged by it, praying also that a transcript of the record and proceedings and papers upon which the judgment herein was rendered, duly authenticated, may be sent to the Supreme Court of the United States, and that such other and further proceedings may be had as are proper in the premises.

969 On consideration whereof the court does allow the writ of error upon the respondent's giving bond according to law in the sum of five hundred dollars.

C. W. SESSIONS,
District Judge.

970

(Indorsed:) No. 638. In the District Court of the United States for the Western District of Michigan, Northern Division. United States of America, petitioner, vs. Clarence M. Brown, receiver of Michigan Lake Superior Power Company, respondent, impleaded with the Edison Sault Electric Company et al., respondents. Order allowing writ of error. Filed Jul. 3, 1912. Chas. L. Fitch, deputy clerk. Leo M. Butzel, attorney for Clarence M. Brown, receiver Michigan Lake Superior Power Company, respondent, 1324 Ford Bldg., Detroit, Mich.

971 THE UNITED STATES OF AMERICA, *ss:*

The President of the United States of America to the judge of the District Court of the United States for the Western District of Michigan, Northern Division, greeting:

Because in the records and proceedings, and also in the rendition of the judgment of a plea which is in the said District Court, before you, between the United States of America, petitioner, and Clarence M. Brown, sole receiver of the Michigan Lake Superior Power Company, respondent, impleaded with the Edison Sault Electric Company, St. Marys Power Company, the Sault Ste. Marie Bridge Company, the City of Sault Ste. Marie, William Chandler, Harris T. Dunbar, the Standard Trust Company of New York, the Chandler-Dunbar Water Power Company, Real Estate Trust Company of Philadelphia, the United States Mortgage & Trust Company, respondents, in the matter of the condemnation of all lands and property of every kind and description north of the present Saint Marys Falls Ship Canal throughout its entire length and lying between said ship canal and the international boundary line at Sault Ste. Marie, in the State of Michigan, a manifest error has happened, to the great damage of the said Clarence M. Brown, sole receiver of the Michigan Lake Superior Power Company, as by his complaint appears. We being willing that the error, if any has been, should be duly corrected, and full and speedy justice done to the parties aforesaid in this behalf, do command you, if judgment be therein given, that under your seal, distinctly and openly, you send the

record and proceedings aforesaid, with all things concerning
972 the same, to the Supreme Court of the United States, together with this writ, so that you may have the same at the city of Washington, on the 10th day of August next, in the said Supreme Court, to be then and there held, that the record and proceedings aforesaid being inspected, the said Supreme Court may cause further to be done to correct that error, what of right, and according to the laws and customs of the United States should be done.

Witness the honorable Edward D. White, Chief Justice of the United States, the 12th day of July, in the year of our Lord one thousand nine hundred and twelve, and of the Independence of the United States of America the one hundred and thirty-seventh.

[SEAL.] CHAS. J. POTTER.
Clerk of the District Court of the United States for the Western District of Michigan, Northern Division.

973 (Indorsed:) No. 638. United States of America. In the District (formerly Circuit) Court of the United States for the Western District of Michigan, Northern Division. United States of America, petitioner, vs. Clarence M. Brown, sole receiver of Michigan Lake Superior Power Company, respondent, impleaded with Edison Sault Electric Company et al. Writ of error. Leo M. Butzel, attorney for Clarence M. Brown, receiver, 1324 Ford Bldg., Detroit. Filed July 12, 1912. Chas. L. Fitch, deputy clerk.

974 THE UNITED STATES OF AMERICA, *ss:*

The President of the United States of America, to the judge of the District Court of the United States for the Western District of Michigan, Northern Division, Greeting:

Because in the record and proceedings, and also in the rendition of the judgment of a plea which is in the said District Court, before you, between the United States of America, petitioner, and Clarence M. Brown, sole receiver of the Michigan Lake Superior Power Company, respondent, impleaded with the Edison Sault Electric Company, St. Marys Power Company, the Sault Ste. Marie Bridge Company, the City of Sault Ste. Marie, William Chandler, Harris T. Dunbar, the Standard Trust Company of New York, the Chandler-Dunbar Water Power Company, Real Estate Trust Company of Philadelphia, the United States Mortgage & Trust Company, respondents, in the matter of the condemnation of all lands and property of every kind and description north of the present Saint Marys Falls Ship Canal throughout its entire length and lying between said ship canal and the international boundary line at Sault Ste. Marie, in the State of Michigan, a manifest error has happened to the great damage of the said Clarence M. Brown, sole receiver of the Michigan Lake Superior Power Company, as by his complaint appears. We being willing that the error, if any has been, should be duly corrected, and full and

speedy justice done to the parties aforesaid in this behalf, do command you, if judgment be therein given, that under your seal,
975 distinctly and openly, you send the record and proceedings aforesaid, with all things concerning the same, to the Supreme Court of the United States, together with this writ, so that you may have the same at the city of Washington, on the 10th day of August next, in the said Supreme Court, to be then and there held, that the record and proceedings aforesaid being inspected, the said Supreme Court may cause further to be done to correct that error, what of right, and according to the laws and customs of the United States, should be done.

Witness the Honorable Edward D. White, Chief Justice of the United States, the 12th day of July in the year of our Lord one thousand nine hundred and twelve, and of the Independence of the United States of America the one hundred and thirty-seventh.

[SEAL.] (Sd.) CHAS. J. POTTER,
Clerk of the District Court of the United States for the Western District of Michigan, Northern Division.

(Indorsed:) No. 638. United States of America. In the District (formerly Circuit) Court of the United States for the Western District of Michigan, Northern Division. United States of America, petitioner, vs. Clarence M. Brown, sole receiver of Michigan Lake Superior Power Company, respondent, impleaded with Edison Sault Electric Company et al. Copy of writ of error deposited for defendant in error July 12, 1912. Chas. L. Fitch, deputy clerk. Leo. M. Butzel, attorney for Clarence M. Brown, receiver, 1324 Ford Bldg., Detroit, Mich.

976 District Court of the United States for the Western District of Michigan, Northern Division.

No. 638.

In the matter of the condemnation of all the lands north of the St. Marys Falls Ship Canal to the international boundary.

Assignments of error.

And now comes Clarence M. Brown, sole receiver of the Michigan Lake Superior Power Company, by Leo M. Butzel, his attorney, and says that upon the record, proceedings, and trial of the said cause and the findings of fact and law and in giving of the judgment and making the final award there is manifest error to the prejudice of the said Clarence M. Brown, receiver for Michigan Lake Superior Power Company, and for error assigns the following:

First. The court erred in concluding and finding the following, being part of finding of fact number twenty-four, viz:

"During part of every year during recent years the United States engineers have wholly stopped the flow of water through the Michi-

gan Lake Superior Canal, thus greatly lessening its value as a power producer."

Second. The court erred in concluding and finding as a matter of law as concluded and found in the following conclusion announced by him:

977 "The COURT. From the view taken of the facts, and which will be specified in the findings to be filed, it follows as a matter of law that the compensation for the property rights described in the petition should be fixed as follows:

(a) To the Michigan Lake Superior Power Company * * * nothing."

Third. The court erred in refusing to award any damages whatever to respondent Michigan Lake Superior Power Company or to its receiver.

Wherefore, respondent prays that the judgment of the Circuit (now District) Court for the Western District of Michigan, Northern Division, may be reversed.

LEO. M. BUTZEL,
Attorney for Clarence M. Brown,
Receiver of Michigan Lake Superior Power Company.

978 (Indorsed:) No. 638. District Court of the United States for the Eastern District of Michigan, Northern Division. In the matter of the condemnation of all the lands north of the St. Marys Falls Ship Canal to the international boundary. Assignments of error. Leo M. Butzel, attorney for Clarence M. Brown, sole receiver of the Michigan Lake Superior Power Company, respondent. 1324 Ford Bldg., Detroit, Mich. Filed July 3, 1912. Chas. L. Fitch, deputy clerk.

979 In the District Court of the United States for the Western District of Michigan, Northern Division.

No. 638.

In the matter of the condemnation of all the lands north of the St. Marys Falls Ship Canal to the international boundary.

STATE OF MICHIGAN,
County of Wayne, ss:

JOSEPH S. MCDOWELL, being duly sworn, deposes and says that on the fifteenth day of July, 1912, at the city of Detroit, he served a true copy of the citation to which this affidavit is attached, upon William K. Clute, special United States attorney, and one of the attorneys for petitioner in the above matter, by inclosing the same in a suitable envelope, upon which the postage was prepaid, and depositing the same in the post office at the city of Detroit, addressed to said William K. Clute, Grand Rapids, Michigan, that being the business address of said William K. Clute to deponent's best knowledge,

information and belief. That service of same has been duly acknowledged by said William K. Clute.

Further deponent says not.

JOSEPH S. McDOWELL.

Subscribed and sworn to before me this 18th day of July, 1912.

SAMUEL R. WILLIAMS,
Notary Public, Wayne County, Michigan.

My commission expires Mar. 5, 1915.

980 THE UNITED STATES OF AMERICA, *ss:*

To the United States of America, greeting:

You are hereby cited and admonished to be and appear at a Supreme Court of the United States to be holden at Washington within thirty days from the date hereof, pursuant to a writ of error filed in the clerk's office of the district court for the Western District of Michigan, Northern Division, wherein Clarence M. Brown, sole receiver of Michigan Lake Superior Power Company, respondent, is plaintiff in error, and was impleaded with the Edison Sault Electric Company, St. Mary's Power Company, the Sault Ste. Marie Bridge Company, the City of Sault Ste. Marie, William Chandler, Harris T. Dunbar, the Standard Trust Company, of New York, the Chandler-Dunbar Water Power Company, Real Estate Trust Company, of Philadelphia, the United States Mortgage & Trust Company, respondents, in the matter of the condemnation of all lands and property of every kind and description north of the present Saint Marys Falls Ship Canal throughout its entire length and lying between the said ship canal and the international boundary line at Sault Ste. Marie, in the State of Michigan, and wherein you are defendant in error, to show cause, if any there be why the judgment and award rendered against said plaintiff in error, as in the said writ of error mentioned, should not be corrected, and why speedy justice should not be done to the parties in that behalf.

Witness the honorable Clarence W. Sessions, district judge for the Western District of Michigan, this 12th day of July A. D., 1912.

C. W. SESSIONS,
District Judge.

981 (Indorsed:) No. 638. In the District Court of the United States for the Western District of Michigan, Northern Division. United States of America, petitioner, vs. Clarence M. Brown, receiver of Michigan Lake Superior Power Company, respondent, plaintiff in error, impleaded with the Edison Sault Electric Company, et al. Citation. Filed July 20, 1912. Fred J. Schultheis, dep. clerk. Leo. M. Butzel, attorney for Clarence M. Brown, receiver Michigan Lake Superior Power Company, respondent, 1324 Ford Bldg., Detroit, Mich.

982 Know all men by these presents, that we, Clarence M. Brown, as sole receiver of the Michigan Lake Superior Power Company, as principal, and the Equitable Surety Company, a corporation organized and existing under the laws of the State of Missouri, duly authorized to act as surety within the State of Michigan, are held and firmly bound unto the United States of America in the full and just sum of five hundred dollars ($500) to be paid to the said United States of America, its certain attorneys or representatives, to which payment well and truly to be made we bind ourselves, our successors and assigns, jointly and severally by these presents.

Sealed with our seals and dated this third day of July, in the year of our Lord one thousand nine hundred and twelve.

Whereas, lately, at the Circuit (now District) Court of the United States for the Western District of Michigan, Northern Division, on the twenty-ninth day of December, A. D. 1911, in a suit pending in said court between the said United States of America, as petitioner, and the said Clarence M. Brown, as sole receiver of the Michigan Lake Superior Power Company, respondent, impleaded with the Edison Sault Electric Company, the Chandler-Dunbar Water Power Company, the Sault Ste. Marie Bridge Company, the City of Sault Ste. Marie, William Chandler, Harris T. Dunbar, the Standard Trust Company of New York, the St. Marys Power Company, Real Estate Trust Company of Philadelphia, the United States Mortgage & Trust Company, respondents, in the matter of the condemnation of all lands and property of every kind and description north of the present Saint Mary's Falls Ship Canal throughout its entire length and lying between said ship canal and the international boundary line at Sault Ste. Marie, in the

983 State of Michigan, a judgment was entered in favor of the petitioner and against the said respondent, in which judgment and proceedings had prior thereto in said case the said Clarence M. Brown, as sole receiver of the Michigan Lake Superior Power Company, claims that certain errors were committed to his prejudice, and has filed in the office of the clerk of said court his petition for writ of error, together with assignments of error intended to be urged by him, upon which an order has been entered allowing the said writ of error to issue upon said respondent's giving bond, according to law, in the sum of five hundred dollars ($500), and a citation issued, directed to the said United States of America, citing and admonishing it to be and appear at a session of the Supreme Court of the United States to be holden at the city of Washington on the 10th day of August next:

Now, the condition of the above obligation is such that if the said Clarence M. Brown, as sole receiver of the Michigan Lake Superior Power Company, shall prosecute his appeal to effect and answer

all damages and costs if he fail to make his plea good, then the above obligation to be void, else to remain in full force and virtue.

Signed, sealed and delivered in presence of—

CLARENCE M. BROWN, *as Receiver*,
By LEO. M. BUTZEL,
Thereunto Duly Authorized.

[SEAL.]

EQUITABLE SURETY COMPANY,
By ROBERT J. WYNNE,
Attorney in Fact.

Countersigned:

C. A. KINSELLA,
Attorney in Fact.

I hereby approve the foregoing bond,
July 12, 1912.

C. W. SESSIONS, *District Judge.*

984 (Endorsed:) No. 638. District Court of the United States for the Western District of Michigan, Northern Division. In the matter of the condemnation of all lands north of the St. Marys Falls Ship Canal to the international boundary. Bond on appeal. Filed July 12, 1912. Chas. L. Fitch, deputy clerk. Leo M. Butzel, atty. for Clarence M. Brown, receiver, Ford Building, Detroit, Michigan.

985 In the District Court of the United States for the Western District of Michigan, Northern Division.

No. 638.

In the matter of the condemnation of all the lands north of the St. Marys Falls Ship Canal to the international boundary.

STATE OF MICHIGAN, *County of Wayne, ss:*

JOSEPH S. MCDOWELL, being duly sworn, deposes and says that on the ninth day of July, 1912, he served a copy of the notice and præcipe, to which this affidavit is attached, upon Kleinhans & Knappen, attorneys for the United States Mortgage and Trust Company, by placing the same in an envelope, upon which the postage was fully prepaid, addressed to said attorneys at the city of Grand Rapids, State of Michigan, that being the business address of said attorneys, to the best of deponent's knowledge, information, and belief; that on the said ninth day of July, 1912, he served a copy of said præcipe and notice upon A. S. Weill, attorney for the Real Estate Mortgage and Trust Company, by enclosing the same in a suitable envelope, upon which the postage was prepaid, and depositing the same in the

post office at the city of Detroit, addressed to said A. S. Weill at the city of Philadelphia, Pennsylvania, that being the business address of said attorney, to the best of deponent's knowledge, infor-
986 mation, and belief; that on the said ninth day of July, 1912, he served a copy of said præcipe and notice upon William K. Clute, special assistant United States attorney, by enclosing the same in an envelope, upon which the postage was fully prepaid, addressed to said William K. Clute at the city of Grand Rapids, Michigan, that being the business address of said attorney, to the best of deponent's knowledge, information, and belief; that the copies so served were true and exact copies of the præcipe and notice to which this affidavit is attached.

Further deponent says not.

JOSEPH S. McDOWELL.

Subscribed and sworn to before me this 18th day of July, 1912.

SAMUEL R. WILLIAMS,
Notary Public, Wayne County, Michigan.

My commission expires Mar. 5, 1915.

987 United States District Court for the Western District of Michigan, Northern Division.

No. 638.

In the matter of the condemnation of all the lands north of the St. Marys Falls Ship Canal to the international boundary.

JOHN H. GOFF,
Attorney for the Chandler-Dunbar Water Power Co.,
Union Trust Bldg., Detroit, Mich.

KLEINHANS & KNAPPEN,
Attorneys for the U. S. Mortgage & Trust Co.,
Michigan Trust Bldg., Grand Rapids, Mich.

A. S. WEILL,
Attorney for the Real Estate Mortgage & Trust Co.,
Trustee, 1418 Land Title Bldg., Philadelphia.

GRANT FELLOWS and WILLIAM K. CLUTE,
Special Asst. U. S. Attorneys.

GENTLEMEN: You will please take notice that the præcipe to the clerk, a copy of which you are herewith served, has been filed in said cause with the clerk of the District Court for the Western District of Michigan, Northern Division.

Dated, July 9th, 1912.

Respectfully,

LEO M. BUTZEL,
Atty. for Clarence M. Brown, Receiver.

988 United States District Court for the Western District of Michigan, Northern Division.

No. 638.

In the matter of the condemnation of all the lands north of the St. Marys Falls Ship Canal to the international boundary.

To the clerk of the United States District Court for the Western District of Michigan, Northern Division:

Take notice that in making your return to the writ of error of Clarence M. Brown, receiver for the Michigan Lake Superior Power Company, which has been issued herein, you will please include in the making up of the record and return the following list of papers and records in the cause, viz:

1. Request of respondent, Clarence M. Brown, receiver of the Michigan Lake Superior Power Company for findings of law.
2. Petition for writ of error. Orig.
3. Order allowing writ of error. Orig.
" Writ of error. Orig.
4. Assignments of error. Orig.
5. Citation and proof of service. Orig.
6. Affidavit showing service of assignments of error.

Copy. Bond.

LEO M. BUTZEL,
Atty. for Clarence M. Brown, Receiver.

989

(Indorsed:) No. 638. District Court for the Western District of Michigan, Northern Division. In the matter of the condemnation of all the lands north of St. Marys Ship Canal to the international boundary. Præcipe. Notice. Filed July 20, 1912. Fred J. Schultheis, dep. clerk. Leo M. Butzel, atty. for Clarence M. Brown, receiver.

990 United States District Court for the Western District of Michigan, Northern Division.

No. 638.

In the matter of the condemnation of all the lands north of the St. Marys Falls Ship Canal to the international boundary.

In the above proceedings for good cause shown, the record being voluminous and the time for preparing the return to the writ of error of the United States being the 31st of July, and the clerk being un-

able to complete the return by that date, it is ordered that the time for the return to said writ of error be, and is hereby, extended to the 15th day of August, 1912.

C. W. SESSIONS,
District Judge.

Dated this 26th day of July, 1912.

991

(Indorsed:) No. 638. In the District Court of the United States for the Western District of Michigan, Northern Division. In the matter of the condemnation of all the lands north of the St. Marys Ship Canal to the international boundary. (No. 638.) Order extending time for return to writ of error. Filed Jul. 26, 1912. Chas. L. Fitch, deputy clerk.

992 UNITED STATES OF AMERICA,
Western District of Michigan, Northern Division, ss:

I, Fred J. Schultheis, deputy clerk of the District Court of the United States for the Sixth Circuit and Western District of Michigan, do hereby certify that I have compared the annexed and foregoing with the originals thereof, now filed and recorded in my office, and that the same are true and correct copies of certain of the files and journal entries (as listed in the index of this transcript)—

In the matter of the condemnation of all lands and property of every kind and description north of the present St. Marys Falls Ship Canal and throughout its entire length and lying between said ship canal and the international boundary line at Sault Ste. Marie, in the State of Michigan.

(Being law case No. 638.)

And I do further certify that the following papers:

Bill of exceptions, stipulation regarding exhibits which accompany bill of exceptions, assignments of error, petition for writ of error, writ of error, citation and proof of service, affidavit showing service of bill of exceptions and notice of settlement, affidavit showing service of assignment of error, waiver of service of assignment of error to U. S. Mtge. & Trust Co., proof of service of United States assignment of errors, præcipe for papers, etc., to be returned as the record;

Petition of Chandler-Dunbar Water Power Company for writ of error, order allowing writ of error, præcipe for writ of error, writ of error, citation and acknowledgment of service, assignment of errors, proof of service of assignment of errors, proof of service of bill of exceptions, admission of service of assignments of errors by Michigan Lake Superior Power Co. and St. Marys Power Co., ad-

mission of service of assignment of errors by United States, præcipe for record;

Petition for writ of error by St. Marys Power Co., order allowing writ of error, writ of error, assignments of error, citation, proof of service of assignment of errors, præcipe for record;

Petition for writ of error by Michigan Lake Superior Power Company, order allowing writ of error, writ of error, assignments of error, citation and proof of service, præcipe for record;

Order extending time for making returns;

are all original files in said cause.

993 And I do further certify that I have forwarded, under separate covers, to the clerk of the Supreme Court of the United States, all exhibits requested in the stipulation hereto annexed.

And I do further certify that said transcript is made up in accordance with the præcipes filed in this cause and annexed herewith.

In testimony whereof I have hereunto set my hand and duly affixed the seal of the said court at the city of Marquette, in said district and division, this twelfth day of August, in the year of our Lord one thousand nine hundred and twelve.

[SEAL.] FRED J. SCHULTHEIS,
Deputy Clerk.

(Indorsement on cover:) File No. 23358, 23359, 23360, 23361. W. Michigan, D. C. U. S. Term No. 783. The United States, plaintiff in error, vs. The Chandler-Dunbar Water Power Company et al. Term No. 784. The Chandler-Dunbar Water Power Company, plaintiff in error, vs. The United States. Term No. 785. St. Marys Power Company, plaintiff in error, vs. The United States. Term No. 786. Clarence M. Brown, sole receiver of The Michigan Lake Superior Power Company, plaintiff in error, vs. The United States. Filed September 18, 1912. File No. 23358 to 23361.

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Office Supreme Court, U. S.
FILED.
JAN 6 1913
JAMES H. McKENNEY,
CLERK.

In the Supreme Court of the United States.

OCTOBER TERM, 1912.

THE UNITED STATES, PLAINTIFF IN ERROR,
vs.
CHANDLER-DUNBAR WATER POWER CO. et al. } No. 783.

CHANDLER-DUNBAR WATER POWER CO., plaintiff in error,
vs.
THE UNITED STATES. } No. 784.

ST. MARYS POWER CO., PLAINTIFF IN error,
vs.
THE UNITED STATES. } No. 785.

CLARENCE M. BROWN, SOLE RECEIVER, etc., plaintiff in error,
vs.
THE UNITED STATES. } No. 786.

ON WRIT OF ERROR TO THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF MICHIGAN.

72053—13

MOTION BY THE UNITED STATES TO ADVANCE.

The Solicitor General moves the court to advance these cases and assign them for hearing during the latter part of the present term.

The cases arose as a result of a proceeding by the United States to condemn all lands north of the present Saint Marys Falls Ship Canal throughout its entire length and lying between said ship canal and the international boundary line at Sault Ste. Marie, Michigan, under the provisions of sections 11 and 12 of the Act of March 3, 1909 (35 Stat., 820–821).

Said cases are brought direct to this court because (1) they involve a question of the right of the United States, under article 1, section 8, paragraph 3, of the Constitution, to take, use and control the *waters* of the St. Mary's River, and *submerged lands* thereunder, for the purpose of aiding commerce and navigation on said river and the connecting waters, without making compensation therefor to the riparian or upland owner, and (2) the judgment restricts the jurisdiction of the United States over a navigable river of the United States.

Other equally important questions as to the liability of the United States to make compensation for property taken by virtue of said act are also involved.

Opposing counsel concur in this motion.

WM. MARSHALL BULLITT,
Solicitor General.

R. T. STRICKLAND,
Special Assistant to the Attorney General.

JANUARY 6, 1913.

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In the Supreme Court of the United States.

OCTOBER TERM, 1912.

THE UNITED STATES, PLAINTIFF IN ERROR,
v.
THE CHANDLER-DUNBAR WATER POWER Company et al. — No. 783.

THE CHANDLER-DUNBAR WATER POWER Company, plaintiff in error,
v.
THE UNITED STATES. — No. 784.

ST. MARY'S POWER COMPANY, PLAINTIFF in error,
v.
THE UNITED STATES. — No. 785.

CLARENCE M. BROWN, SOLE RECEIVER OF the Michigan Lake Superior Power Company, plaintiff in error,
v.
THE UNITED STATES. — No. 786.

BRIEF FOR THE UNITED STATES.

STATEMENT OF THE CASE.

These cases arise under section 11 of "An act to provide for the repair, maintenance, and preservation of pubiic works on rivers and harbors, and for

other purposes," approved March 3, 1909 (35 Stat. L., 820), the first paragraph of which recites—

> SEC. 11. That the ownership in fee simple absolute by the United States of all lands and property of every kind and description north of the present St. Marys Falls Ship Canal throughout its entire length and lying between said ship canal and the international boundary line at Sault Ste. Marie, in the State of Michigan, is necessary for the purposes of navigation of said waters and the waters connected therewith.

Under section 11 of said act Congress declared that the property to be taken is necessary for the purposes of navigation, and by reason of which directed the Secretary of War to take immediate proceedings for the acquisition in fee simple of the same by condemnation or otherwise, and required that he should proceed in such taking by filing in the office of the register of deeds of Chippewa County, in the State of Michigan, a writing stating the purpose for which the property is taken, together with a full description of the same, and that after such filing and 10 days' publication of said writing and description the United States shall be entitled to and shall take immediate possession of the property described, and may at once proceed with such public works thereon as have been authorized by Congress for the uses of navigation.

The Circuit Court of the United States for the Western District of Michigan was, by said section, given exclusive jurisdiction to hear condemnation

proceedings and to determine what compensation should be awarded for the taking of the property, and provided that possession of the same might be taken by the United States prior to any determination of the amount of compensation.

The Secretary of War requested the Attorney General to institute and conduct a proceeding for the formal condemnation of the property described in paragraph 3 of said section 11, and in compliance with said request the petition of the United States for condemnation, containing a description of the property, was filed (Rec., 2–8), following which answers to said petition were made and filed by the defendants, a stipulation was entered into waiving trial by jury (Rec., 38–39–40), and an order was entered by the court setting a day for the trial (Rec., 44).

The land to be taken at Sault Ste. Marie, Mich., under said proceedings is generally described as parts of private land claims Nos. 95, 96; part of village lot No. 3; Portage Street and the Indian reservation; all that tract or parcel of land lying north of St. Marys Falls Canal and designated as Portage Street; and a certain island near the foot of St. Marys Falls on the American side and known as the Island of Chief O'Shaw-Waw-No, now designated as Island No. 5, together with all the riparian rights appurtenant to the property described above, including all structures and appurtenances of every kind and description, out to the interna-

tional boundary line. (Rec., 3–5; see map between pp. 6 and 7 for particular description.)

The defendants named in the petition are the Chandler-Dunbar Water Power Company, the St. Mary's Falls Power Company, the Edison-Sault Electric Company, William Chandler, Harris T. Dunbar, Sault Ste. Marie Bridge Company (dismissed as to the Bridge Co.; Rec., 30), Standard Trust Company of New York, and City of Sault Ste. Marie, Mich.

The petition recited (Rec., 5) that application to the court for condemnation of the property was made for the "purpose of acquiring by the United States the title in fee simple, clear of all clouds or encumbrances, to all the lands, rights, and property above described, for use of the United States for navigation purposes, and that the acquisition thereof was authorized and appropriation made therefor by the said act of March 3, 1909 (35 U. S. Stat., pp. 820, 821, 822)."

The said petition of the United States was amended to make defendants (Rec., 21) the Michigan Lake Superior Power Company and receivers Charles D. Warren and Clarence M. Brown, the Real Estate Trust Company of Pennsylvania and the United States Mortgage & Trust Company of New York, all of whom claim to be interested in the property to be condemned by reason of owning or having an interest in the right of diverting the flow of water through a certain canal owned by the Michigan Lake Superior Power Company, beginning above the rapids of the St. Marys River and having an outlet a short distance below the same.

Each and all of the various works of the Chandler-Dunbar Water Power Company and the Edison-Sault Electric Company and their predecessors, for the purpose of water-power development in the St. Marys River at the falls were constructed on the submerged lands of that river, north of the ship canal locks, under authority from the Secretary of War, as appears by certain revocable licenses or permits issued to them, and no other occupation of said submerged land has existed or taken place save under the authority of the Secretary of War. (Rec., 48; see Exhibit 44, covering application for, and permits, Rec., 372, 375, 377, 381, 382, 385, 387, 389, 390, and 392.)

Under section 11 of said act of March 3, 1909, (sixth paragraph)—

> Every permit, license, or authority of every kind, nature, and description heretofore issued or granted by the United States, or any official thereof, to the Chandler-Dunbar Water Power Company, the Edison-Sault Light & Power Company and the Edison-Sault Electric Company or the St. Mary's Power Company, shall cease and determine and become null and void on January first, nineteen hundred and eleven, and the Secretary of War is hereby instructed to revoke, cancel, and annul every such permit, license, or authority, to take effect on January first, nineteen hundred and eleven.

The seventh paragraph of said section 11 authorizes the Secretary of War to permit the Chandler-Dunbar Water Power Company and the Edison-Sault Electric

Company to maintain their works and utilize the water power in said river at the rapids in so far as the same would not interfere with navigation under such rules as might be imposed by the said Secretary of War, but said permits were not to extend beyond January 1, 1911 (35 Stat., 821). Notice was given to the two companies revoking all permits which have been issued. (Rec., 362, 363, 364, 366, 367, 368.)

It was contended by the petitioner that the St. Marys River is a continuous public navigable waterway from Lake Superior to Lake Huron, and in open court it was conceded by all parties that said river is a navigable river and a part of the *Great Lakes system.* (Rec., 181.)

Upon the day set for hearing of the proceedings the petitioner produced witnesses to prove that the St. Marys River is a public navigable waterway of the United States connecting the *Great Lakes system;* that the city of Sault Ste. Marie made no claim to Portage Street north of the canal (Rec., 185); that private land claims numbered 95 and 96 together would be "worth about a thousand dollars," the Indian reservation and that portion of village lot numbered 3 involved here about "one hundred dollars an acre" (9 acres and a fraction), or a thousand dollars; that islands numbered 1 and 2 and Portage Street are together worth "two hundred dollars"; that Island No. 5 will be worth "one thousand dollars"; and that a dock owned by the Chandler-Dunbar Company is worth "one thousand dollars." (Rec., 188.)

And the petitioner also produced testimony to show the value of the property of the Edison-Sault Electric Company, consisting of a power house, distributing system, and other equipment, as well as a miscellaneous lot of property belonging to the Chandler-Dunbar Water Power Company.

The United States then rested its case, and thereupon the Chandler-Dunbar Company produced a number of witnesses to prove that on the basis of the present space in the St. Marys River for locks, including a possible fourth lock and 4,000 cubic second feet for navigation, power to be used in the bed of the stream, with railroad transportation to and from the mills in the bed of the stream, the value of the power taking the head as fixed by the engineers in consultation, and taking the flow as fixed by them (Rec., 190), attached to the land owned by said company would be worth "between five and six million dollars" (Rec., 191); that the value of the company's land, including Portage Avenue, for canal purposes would be "worth half a million dollars" (Rec., 196); and that certain proposed or contemplated power houses could be erected for $1,832,736 and other amounts.

The Chandler-Dunbar Water Power Company having rested its case, the Michigan Lake Superior Company and Charles M. Brown and Charles D. Warren, as receivers of that company, and the St. Mary's Power Company produced a witness who testified as to the effective fall of the river as being 15 to 16 feet without Island No. 5 and with it, 18 to

19 feet; that he considered said island worth $50,000 (said island contributing to head) (Rec., 232–233), and that the average flow for the three years through said company's canal was 8,560 cubic second-feet and the capacity of the canal is 32,000 cubic feet per second.

And in rebuttal the petitioner produced witnesses who testified (Rec., 236) that the value of the Chandler-Dunbar Water Power Company's power is largely speculative; that the head, with mean elevation of Lake Superior of 602.45, and allowing for the velocity flow at the east boundary line of the Chandler-Dunbar properties for that head—for that gauge elevation—would be 9.77 feet in front of said property (Rec., 191); that the cost of development would be three or four million dollars at least; that the cost to operate would be $50,000, and that depreciation and obsolescence would be $75,000 to $100,000 besides taxes of at least $50,000 (Rec., 237); that "of course, that is all a matter of judgment and some uncertainty * * * the theory being that the title is absolutely complete and perfect and there is no question of Government control of the water" (Rec., 242); that $500,000 would be the limit of the value of the power (Rec., 247); that "beyond the water used to propel the ships through the locks, and the floating of forest products, navigation always needs the water for controlling the levels of the lakes" (Rec., 254). The Poe Lock and the new lock are based upon a fixed elevation of Lake Superior and the lakes below, and the engineers of the United States in

maintaining lake levels base their work on what are called datum planes; that there are certain levels of water and it is essential that the levels be kept to those planes in order to have the depth in the channels above and below maintained; that the Government should have the waters of St. Marys River for such purposes and that compensating works could not regulate Lake Superior any better than is being done by nature, and uniformity of flow in the St. Marys River is essential to the best interests of navigation of the river itself, and any attempt by man to do it, instead of improving the situation, would make a failure of it. (Rec., 255, 256, 257.)

Further evidence was produced by the petitioner to show that on account of the great traffic on the Lakes it is absolutely essential for the Government to control the St. Marys River in the interest of commerce and navigation. (Rec., 265–291.)

Subsequent to the production of the oral testimony requests were filed by the United States, the Chandler-Dunbar Water Power Company and other defendants that the court find the facts and the law pertaining to the issues in the case (Rec., 46–47), and the court complying with the requests made and filed statements styled "findings of fact" (Rec., 79) and "conclusions of law" (Rec., 108), followed by the "Opinion of Judge Denison" (Rec., 404) and "Final Award" (Rec., 155).

In said findings of fact the court by a process of reasoning finds that water sufficient to develop 6,500 horsepower (theoretical) on the property of the

Chandler-Dunbar Company is surplus water for which compensation should be assessed in the proceedings for condemnation, and further, "such 6,500 horsepower has an annual value of $55,000, a present value of $550,000"; that the upland along the rapids comprising the Chandler entry, part of Portage Street, and part of private land claim No. 3 has a value of $65,000 less 7 per cent on account of Portage Street, or $60,450, basing the same upon uses for factory site in connection with power development and for lock and canal or bridge purposes; that claims 95 and 96 front on deep water above the head of the rapids and have been used for wharfage, the wharfage structures and filling now thereon having cost $12,000, and it is found that the value of these two claims based upon usage for wharfage and warehouse purposes by reason of desirability for lock and canal purposes and in connection with water-power development are worth $25,000; that the value of the existing dike now used to bring water to the mill site is $16,524; that the value of the interests of the Edison-Sault Electric Company is $300,000; that the value of Island No. 5, including strategic value and suitableness for lock and canal purposes, is $21,000 and one-half of the sum of $676 for the property of International Bridge Company due the Chandler-Dunbar Company, $338, all of which aggregates as a finding of fact a value of $973,312 for all of the property to be taken.

Exceptions were filed by the United States to the findings of fact and conclusions of law, together with request to limit the award and recovery, and a final

award or judgment was made by the court and entered of record awarding to the several parties said sum of $973,312.

By agreement with the International Bridge Company its property was taken by conveyance, and by stipulation the property of the Edison-Sault Electric Company was acquired. Therefore the sum of $300,000 is to be deducted, which reduces the amount of the judgment to $673,312, and as to this last-mentioned sum objection is made by the United States to all of the same except $45,462 (Rec., 160), it being contended that there should be eliminated and disallowed from the award or judgment the sum of $550,000 for raw water power; the sum of $18,600 (being 93 per cent of the additional value given the upland for use as a factory site in connection with the development of 6,500 horsepower, either as a single site or for several smaller factories to use the surplus of 6,500 horsepower not now used in the city); also eliminating $23,250 (being 93 per cent of the sum of $25,000, which sum was added to the base value for the reason that it was desirable for use for lock and canal or bridge purposes); also the sum of $10,000 from the allowance for private claims 95 and 96 by reason of their desirability for lock and canal purposes; also the sum of $5,000, value given in connection with the land along the rapids if used as a part of the development of 6,500 horsepower; and also the sum of $21,000 as compensation for Island No. 5, the sum of $5,000 being awarded as additional value as being suitable for lock and canal purposes, and $15,000 as

strategic value (Rec., 147), and $1,000 for the reason the St. Mary's Falls Power Company does not own said island, all of which aggregates the sum of $627,850.

Exceptions to the final award were filed by the United States (Rec., 160); exceptions to the findings of fact and conclusions of law were filed by the Chandler-Dunbar Water Power Company (Rec., 500–514), and assignments of error by the parties were made and a bill of exceptions drawn (Rec., 173) and settled; whereupon writs of error were sued out by the United States, the Chandler-Dunbar Company, St. Mary's Power Company, and the Michigan Lake Superior Power Company to this court.

ARGUMENT.

Section 11, paragraph 1, of the act of March 3, 1909 (35 Stat. L., 820), asserts:

> That the ownership in fee simple absolute by the United States of all lands and property of every kind and description north of the present St. Marys Falls Ship Canal, throughout its entire length and lying between said ship canal and the international boundary line at Sault Ste. Marie, in the State of Michigan, is necessary for the purpose of navigation of said waters and the waters connected therewith.

The paragraph of section 11 above is clear and states in positive terms that the ownership of "all lands and property of every kind * * * is necessary for the purpose of navigation of said waters and the waters connected therewith."

This paragraph refers only to the condemnation of land and property and makes no mention of the waters of the St. Marys River and their acquisition or payment for the same. As the waters of the St. Marys River can not be the subject of private ownership, being the property of the public, the word "property" in said paragraph is taken to mean uplands and such improvements as are found thereon or improvements upon the subaqueous lands allowed under authority of Congress by permission from the Secretary of War by permits.

Some attention must be given to the expression "and the waters connected therewith," meaning Lakes Superior, Michigan, Huron, St. Clair, Erie, Ontario, and connecting waterways between said lakes. The control of the flow of the waters of St. Marys River is absolutely necessary to regulate the levels of Lake Superior above and the other lakes below the "waters connected" with the St. Marys River. The flow of water which goes down said river is required for purposes of commerce and navigation on all of the "waters connected therewith," being the entire Great Lakes system, comprising about 93,100 square miles of navigable waters, the regulation of which must of necessity be in the hands of the Government for the general welfare of the people, as testified to by Col. C. McD. Townsend, Corps of Engineers, United States Army. (Rec., 254.)

In the sixth paragraph of section 11, Congress, in no uncertain language and without any direct or implied reference to compensation to the holders of permits to

use the waters of St. Marys River, declared that "every permit, license, or authority of every kind * * * and description * * * shall cease and determine and become null and void on January first, nineteen hundred and eleven," and the Secretary of War was directed to revoke all permits, and did so, and no claim for compensation was made.

The undisputed assertion of ownership and authority of Congress over the St. Marys River exercised in said sixth paragraph is further asserted in the eighth paragraph of said section 11, wherein the President is requested to open negotiations with the Government of Great Britain for the purpose of effectively providing by suitable treaty for maintaining ample water levels for the use of navigation in the Great Lakes "and the waters connected therewith" by the construction of such controlling and remedial works in the connecting rivers and channels of such Lakes as may be agreed upon by both Governments, while in the ninth paragraph the Secretary of War is instructed to prepare plans for constructing in the rapids of St. Marys River a "filling basin or forebay, from which the ship locks shall be filled" as an aid of navigation.

In the eleventh paragraph of said section it is declared by Congress that all rights now or hereafter owned by the United States in said river shall be "primarily for the purposes of navigation" and that under no circumstances "shall any rights be granted in said river which will interfere with the needs of navigation."

Congress, in the paragraphs referred to above, has expressed its purpose and intentions clearly and positively that complete ownership and control of the entire St. Marys River "is necessary for the purpose of navigation of said waters and the waters connected therewith" and so having expressed itself it is not in the power of the courts or any person to decide otherwise or that only a portion is needed for navigation and that the balance belongs to private parties, and if taken payment therefor should be made.

Reference will now be made to the assignments of error principally relied upon.

LIV.

Navigable Waters. Public Domain.

The court erred in refusing to conclude and find as a matter of law, as requested by said petitioner in its third request, viz:

> That the dominion of the United States over the navigable waters for the purpose of commerce is the same as over the public domain.

It has been held by this court that the navigable waters of the United States are as subject to congressional legislation as the public domain. In the case of *Pensacola Telegraph Company* v. *Western Union Telegraph Company* (96 U. S., 1), an act of Congress passed July 24, 1866, authorizing and giving consent to the construction and maintenance and operation of telegraph lines "over any portion of the public domain and along any of the military post roads * * * and over, under, or across the navigable

streams or waters of the United States," was interpreted by the court. The Chief Justice speaking, said (pp. 11 and 12):

> It is insisted, however, that the statute extends only to such military and post roads as are upon the public domain. * * * There is nothing to indicate an intention of limiting the effect of the words employed; * * * the grant evidently extends to the public domain, the military and post roads, and the navigable waters of the United States. These are all within the domain of the National Government to the extent of the national powers, and are, therefore, subject to legitimate congressional regulation.

By section 11 of the act of March 3, 1909, Congress proposes to regulate the waters of the St. Marys River and the "waters connected therewith" and has the same right to legislate for navigation as over what is commonly known as the public domain, without making compensation for the privilege.

IV.

Navigable Waters. Public Property.

The court erred in refusing to conclude and find as a matter of law, as requested by said petitioner in its fifth request, viz:

> That the navigable waters of the United States, with their beds, for the purpose of commerce and navigation, being the public property of the Nation, when any portion of this property is required by the United States for its uses in aid of navigation there is no condemnation necessary. It is only necessary for Con-

gress to order the taking of the part needed for the specified use.

These submerged lands, with the waters, are the public property, and not private property, and when the United States needs any of these lands for purposes of commerce or navigation it can take them without condemnation or compensation either to the State or its grantees.

Hawkins' Point Light-House Case (39 Fed. Rep., 77, 80, 83).

In Lorman *v.* Benson (8 Mich., 32), Judge Campbell, speaking, declared the right of navigation to be one to which all others were subservient.

LVI.

Necessity of Taking not Judicial.

The court erred in refusing to conclude and find as a matter of law, as requested by said petitioner in its sixth request, viz:

That the necessity or expediency of appropriating a part or all of the waters of St. Marys River for public use can not be the subject of judicial cognizance.

When the use is public, the necessity or expediency of appropriating any particular property is not a subject of judicial cognizance.

Boom Co. v. *Patterson* (98 U. S., 406).

The question of necessity is not one of a judicial character, but rather one of determination by the law-making branch of the Government.

Backus v. *Fort St. Union Depot* (169 U. S., 568).

Cherokee Nation v. *Kansas Ry. Co.* (135 U. S., 641).

By the Constitution, the Government is divided into three distinct and independent branches, and it is the duty of each to abstain from and to oppose encroachment on the other.

McCray v. *United States* (195 U. S., 38).
Hayburn's Case (2 Dallas, 410).
Veazie Bank v. *Fenno* (8 Wall., 548).
Spence v. *Merchant* (125 U. S., 335).
Champion v. *Ames* (188 U. S., 363).
Bird v. *United States* (187 U. S., 124).

The use for which land is taken having been determined to be a public use, the quantity which should be taken is a legislative one and not a judicial question.

Shoemaker v. *United States* (147 U. S., 282, 298).

It is for Congress to determine when its full power shall be brought into activity, and as to the regulations and sanctions which shall be provided.

Gilman v. *Philadelphia* (3 Wall., 725).
United States v. *New Bedford* (1 Woodbury and Minot, 420–421).
United States v. *Coombs* (12 Pet., 72).

The court in the VI conclusion of law (Rec., 109) decided it is necessary to take part of the uplands and some of the submerged land for the purpose of navigation, and as to the remainder and the flow of the water the necessity is constructive, secondary, and incidental; and in the XXXIII conclusion of

law (Rec., 114) the court found that 6,500 theoretical horsepower is to be considered as surplus water for which compensation should be allowed the Chandler-Dunbar Company, while in the LI conclusion of law (Rec., 116) the sum of $550,000 is allowed for raw water. Congress having determined by the act of March 3, 1909, section 11, the necessity for taking, it is not for the judiciary to decide the degree of necessity, nor apportion the waters of the St. Marys River and to declare what part is surplus water and not needed for navigation, and what part is required, if taken, should be paid for.

LIX.

Fifth Amendment to Constitution.

The court erred in refusing to conclude and find as a matter of law, as requested by said petitioner in its tenth request, viz:

> That while the submerged lands remain a part of the bed of the river it is not private property in the sense of the fifth amendment to the Federal Constitution.

The navigable waters and their beds are the public property of the Nation, and subject to all the requisite legislation of Congress.

> *Gilman* v. *Phila.* (3 Wall., 725).
>
> *Hawkins' Point Light-House Case* (39 Fed. Rep., 87).

The fifth amendment provides only that *private property* shall not be taken without compensation, making no reference to public property.

> *Scranton* v. *Wheeler* (179 U. S., 160).

LXII.

Obstruction to Navigable Waters.

The court erred in refusing to conclude and find as a matter of law, as requested by said petitioner in its thirteenth request, viz:

> That the erection of any obstruction to the navigable capacity of any of the waters of the United States, not affirmatively authorized by Congress, is unlawful, and it is unlawful to construct or commence the construction of any bridge, dam, dike, or causeway over or in any port, roadstead, haven, harbor, canal, navigable river, or other navigable water of the United States, until the consent of Congress to the building of such structure shall have been submitted to and approved by the Chief of Engineers and by the Secretary of War, a violation of which shall be deemed a misdemeanor punishable by a fine or imprisonment. (Secs. 9, 10, and 12, act of Mar. 3, 1899, 30 Stat. L., p. 1151.)

The above assignment of error is based upon a request of the petitioner for a finding as a matter of law that no obstructions can be placed in any of the navigable waters of the United States without the consent of Congress and which was "disapproved" by the court below because "so broadly stated." (Rec. 294.) This request is no broader than the act of Congress from which it was taken, being almost the exact language of the act of March 3, 1899, pertaining to rivers and harbors. So early as the case of *Gibbons* v. *Ogden* (9 Wheat., 1) it was held "the power to regulate commerce comprehends the con-

trol * * * of all the navigable waters * * * and includes * * * the power to keep them open and free from any obstructions." (*South Carolina* v. *Georgia*, 93 U. S., 10; *Wisconsin* v. *Duluth*, 96 U. S., 387.)

LXIII.

Permits.

The court erred in refusing to conclude and find as a matter of law, as requested by said petitioner in its fourteenth request, viz:

> That in view of the provisions of sections 9, 10, and 12 of said act of March 3, 1899, structures of any character can not lawfully be placed in or over any of the navigable waters of the United States without permits issued by consent of Congress upon the recommendation of the Chief of Engineers when approved by the Secretary of War, and in holding that said request is not controlling on the question of compensation.

This request was "disapproved. So broadly stated" (Rec., 295), although based upon an act of Congress whose power to control the navigable waters can not be disputed.

The power to regulate commerce comprehends the control for that purpose, and to the extent necessary, of all the navigable rivers of the United States which are accessible from a State other than that in which they lie. For this purpose they are the public property of the Nation, and subject to all the requisite legislation by Congress. This necessarily includes the power to keep them open and free from any

obstruction to their navigation interposed by the States, or otherwise; to remove obstructions where they exist; and to provide by such sanction as deemed proper, against the occurrence of the evil and for punishment of the offenders.

South Carolina v. *Georgia* (93 U. S., 10).
Wisconsin v. *Duluth* (96 U. S., 387).

As the riparian owner can not erect structures in a river without the consent of the Government to use the water for power purposes and the United States has control of the navigable waters, it can not be made to make compensation to the riparian owner when it needs the public waters for commerce and navigation.

LXIV.

The court erred in refusing to conclude and find as matter of law, as requested by said petitioner in its fifteenth request, viz:

> That to preserve the navigable waters for purposes of navigation such permits must contain terms and conditions and be revocable at the pleasure of the Government according to the needs of navigation, otherwise the control of said waters would be in part surrendered to private parties, and in modifying the same by adding "but the needs of navigation must not be merely imaginary."

All permits or licenses heretofore issued have contained terms and conditions; as, for example, those shown on page 391 of the record, wherein the Edison Sault Electric Company asked permission to con-

struct an embankment in the St. Marys River Rapids "adjacent to our property," and were "granted a license, revocable at will by the Secretary of War," containing three "provisions and conditions."

It is not to be assumed the Secretary of War will act upon imaginary needs of commerce and navigation or anything under his authority, but as to the needs of navigation, acting under authority of Congress, his conclusions are final, and permits or licenses are issued embodying such conditions as are thought proper or are deemed best, or they may be denied entirely.

LXV.

The court erred in refusing to conclude and find as a matter of law, as requested by said petitioner in its eighteenth request, viz:

> That a court has not the power to decide or assume permits will be issued to persons to erect structures in navigable waters under the control of Congress, in view of the provisions of the act of March 3, 1899, and in holding that said request is not controlling on the question of compensation.

Congress having rightfully assumed in the interest of navigation the control of the navigable waters—public property of the Nation—and having declared by the act of March 3, 1899 (30 Stat. L., p. 1151), "that the erection of any obstruction to the navigable capacity of any of the waters of the United States not affirmatively authorized by Congress is unlawful," a court has not the power to decide whether permits

will or will not be issued and that, upon a failure to issue a permit or when it is deemed expedient to revoke one in operation, compensation shall be made.

The decision as to granting permits rests solely with Congress, for, as said in *McCray* v. *United States* (195 U. S., 38), the judicial can not prescribe to the legislative department of the Government limitations upon the exercise of its acknowledged powers and, as illustrated by the case of *The Bridge Co.* v. *The United States* (105 U. S., 470), although a permit was granted to erect a bridge the court decided that the company was not entitled to compensation by reason of the permit being revoked.

New York & Erie Rd. Co. v. *Young* (33 Pa. St., 175).

Pratt v. *Brown* (3 Wis., 532).

LXVIII.

Division of Navigable Waters.

The court erred in refusing to conclude and find as a matter of law, as requested by the petitioner in its twenty-third request, viz:

> The Federal courts possess no power to parcel out the waters of said navigable river between the public and the private owner of the submerged lands, which are appurtenant to the uplands described in the petition, and declare by a judgment or decree that any portion of said navigable waters is not needed for navigation and is surplus water over and above navigation needs, is the absolute private property of the riparian owner, and that, if used by the public in its exercise of

> the right to regulate navigation on said river, either now or in the future, must be either condemned or bought and paid for from the owner of the fee to such subaqueous lands.

In the case of *Shoemaker* v. *United States* (147 U. S., 282–298) it is declared:

> The use for which the land is taken having been determined to be a public use, the quantity which should be taken is a legislative and not a judicial question.

In the case of the waters of the St. Marys River, Congress having declared all are needed for the public use of navigation, the court can not determine the quantity required for that purpose any more than it could limit the amount of land necessary for a public improvement.

Should Congress enact that two lighthouses be built upon the submerged soil of a harbor, can a court by a decree say only one is necessary and for that one no compensation is to be made, but as to the unnecessary one the owner of the submerged soil must be compensated?

The commerce clause of the Constitution gives the Government absolute dominion and control over the navigable waters of the Nation and the submerged soil beneath, and the courts can not determine to what extent that dominion and control shall be exercised or what amount of water and submerged land is needed for navigation and the balance private property, and if believed by Congress to be necessary in aid of navigation must be paid for if taken.

"The common-law principle is, in fact, that the owners of the banks have no right to the water of the navigable rivers."

Carson v. *Balzer* (2 Binney, 475, 477, 478).
Shively v. *Bowlby* (152 U. S., 31, 33).

LXXIII.

Value for Public Use.

The court erred in refusing to conclude and find as a matter of law, as requested by said petitioner in its twenty-eighth request, viz:

> The governmental necessity to have the lands described in the petition for the purpose of erecting thereon canals and locks and other public works in aid of navigation is not an element of value to be added to making up the owner's award and not an increment of value in said property to which the private owner is entitled. Nor can the favorable location of the property for the installation of canals and locks thereon, or a so-called strategic value claimed therein, be considered as a factor for the purpose of enhancing the value of the property to the private owner in these proceedings, since such value would be made up of the necessity of the Government to have the property for a public use. Public works herein described are constructed in the general interest of the people in aid of interstate marine commerce on the Great Lakes and not for the enhancement of the value of private property upon which they are or may be erected.

"In estimating the value of land taken for a public use, its value for such use is not to be considered."

(*United States* v. *Scufert Bros. Co.*, 78 Fed. Rep., 523–524.) In this case the court said, in speaking of land sought to be acquired by the United States through proceedings in condemnation for a portage boat railway along the Columbia River between Celilo and Dalles City, Oreg., that:

> An estimate of value based upon the especial adaptation of the land condemned to railway purposes is not warranted by the facts of the case, in the absence of anything to show a reasonable expectation of some demand at some time for the use of this land for that purpose. Without this, there is nothing to distinguish this land from any other land, no matter where located. The public agitation for the construction of a boat-railway between Celilo and The Dalles, which has led to the location by the Government of the present line, may tend to warrant a reasonable expectation of the construction of such a road. But, as has already been shown, the demand which is thus created can not be considered in estimating the value of the land taken. The owner can not avail himself of the adaptability of these lands to a boat-railway line, to enhance his recovery. The character and magnitude of such an undertaking, as a practical matter, takes it out of the field of private enterprise, if it is one in which such enterprise is authorized by law to engage. It is necessarily, therefore, a great public work, and must, so far as the question under consideration is concerned, be assumed to be within the exclusive province of the Government. The owner of the lands

condemned is wholly precluded by these conditions from the use which the Government seeks to make of them. That use is in no way available to him. It is not a property right in him, and adds nothing to the value of which his lands are possessed, or to the advantage of which he will be deprived by the proposed appropriation. He is entitled to the full value of his land considered with reference to all the uses, present and prospective, which he can, or has the right to, make of it; but the necessity of the Government can not be made a measure of his compensation.

Gilmer v. *Lime Point* (19 Cal., 47).

R. R. Co. v. *Pearson* (35 Cal., 247).

LXXXII.

San Diego Land Co. v. *George Neale et al.* (88 Cal., 62–65).

City of Santa Ana v. *Harlin* (99 Cal., 538).

The court erred in refusing to conclude and find as a matter of law, as requested by said petitioner in its fortieth request, viz:

> The Chandler-Dunbar Water Power Company is estopped by reason of its acceptance of the revocable permits from claiming against the Government any private property in the subaqueous lands of the usufruct of the waters of St. Marys River.

The application for and acceptance of permits or licenses to occupy said river by said company is an acknowledgment of the paramount right of the Government in and to the subaqueous lands and waters of the St. Marys River.

XCI.

Right of Riparian to the Flow.

The court erred in granting and approving the twentieth request for conclusions of law of the Chandler-Dunbar Water Power Company, viz:

> Subject to the power of Congress to regulate commerce, the Chandler-Dunbar Water Power Company as a riparian proprietor was entitled to the continued natural flow of the water of the River St. Mary past to its shore without diminution or alteration.

The St. Marys River being a navigable stream, its waters and subaqueous lands are, in the language of the Supreme Court in *South Carolina* v. *Georgia* (93 U. S., 10), "the public property of the Nation and subject to all the requisite legislation by Congress." In that case it was determined that Congress has the power to close one of several channels in a navigable stream if, in its judgment, the navigation of the Savannah River would be thereby improved. A channel in that river was divided by Hutchinson's Island making two channels, one of which was to be improved to the detriment of the other, which would cause a loss of riparian interests on the channel closed.

In the case of *The Black River Imp. Co.* v. *The La Crosse Booming and Trans. Co. et al.* (54 Wis., 679) the court said:

> It is claimed that the riparian owner on a navigable stream has no right as against the public, or persons or corporations acting in behalf of the public, making improvements of

such navigable stream, to have the waters of such stream flow in their accustomed course in front of his lands; and this contention on the part of the learned counsel for the appellant is, we think, sustained by the most learned courts of this country, and that doctrine has been quite clearly sanctioned by several decisions of this court. (*Canal Appraisers* v. *The People*, 17 Wend., 571; *People* v. *Canal Appraisers*, 33 N. Y., 461, 500.)

These cases were thoroughly discussed by learned counsel, and the opinions delivered were learned and exhaustive of the subject, and in both cases it was held "that riparian owners along a navigable stream are not entitled to damages for any diversion or use of the waters by the State." (*Lansing* v. *Smith*, 8 Cow., 146; *The People* v. *Tibbitts*, 19 N. Y., 526, 527, 528.)

Riparian rights are appurtenant to the ownership of the land on the shore or bank of a stream, without reference to the title in the bed. The word "riparian" is relative to the bank and not the bed of the stream, and the title to the soil constituting the bed of a river does not carry with it any exclusive right of property in the running water of the stream.

Delaplaine v. *The C. & N. W. Ry. Co.* (42 Wis., 229.)

In the case of *McKeen* v. *Delaware Division Canal Co.* (49 Pa. St., 424) it is held:

Everyone who buys property upon a navigable stream purchases subject to the superior right of the Commonwealth to regulate and

improve it for the benefit of all her citizens. If, therefore, he chooses to place his mills or his works, for the qualified use he may make of the water, within the limits or influence of high water, he does so at his own risk, and can not complain when the Commonwealth, for the purpose of improvement, chooses to maintain the waters of the stream at a given height within its channel.

Black River Imp. Co. v. *La Crosse B. & T. Co.* (54 Wis., 680).

Fitchburg R. Co. v. *R. Co.* (3 Cush., 58–88).

As against the State the riparian owner is not entitled to have the waters of a navigable stream flow past his land.

Withers v. *Buckley* (20 How., 84).
South Carolina v. *Georgia* (93 U. S., 10).

XCV.

The court erred in granting and approving the third request of the respondents, St. Mary's Falls Power Company and the Michigan Lake Superior Power Company, for conclusions and findings of law, viz:

> Island No. 5, by reason of its location, has a natural value for lock and canal purposes, and has a special desirability for either or both of such purposes.
>
> In ascertaining * * * actual value, generally everything which actually enhances its present worth should be taken into consideration; not, however, the fact that it is necessary or indispensable for the pur-

> pose for which it is claimed by the public. Those necessities which induce it to be claimed, or the fact that it is desired for public use, should in no wise enter into the consideration of its value. To allow that would be to measure its value by the immediate necessities of the public rather than its actual worth.
>
> *Railroad Company* v. *Elliott* (5 Nev., 358–367).

This island should be appraised upon the same principle that all property is valued; that is, unless present adaptability to more advantageous uses can be shown, the property should be valued in the light of its present use—that is, its worth to a purchaser desiring to make the same use of it (Randolph on Eminent Domain, sec. 243)—and the value must not be speculative, as the land is not to be valued as if the possible use were in existence, but at its present worth in view of the possibility.

There is no possibility of this island being used for lock or canal purposes other than by the Government, and therefore there is no market value for that purpose.

XCIX.

The court erred in concluding and finding as a matter of law, as concluded and found in conclusion of law numbered six, viz:

> The existing necessity in this case for taking the uplands and some of the submerged lands and flow of the water for purposes of navigation is actual, present, and direct; as

to the remainder of the submerged lands and flow of the water, such necessity is constructive, secondary, and incidental.

In this finding the court undertakes to divide between the Government and the private upland owner the waters of a public navigable stream and to decide what are the necessities of navigation, a matter which is exclusively within the jurisdiction of the legislative branch of the Government to determine, for "the quantity which should be taken is a legislative and not a judicial question."

Shoemaker v. *United States* (147 U. S., 282–298).

Lake Superior, at the head of St. Marys River, is the reservoir of the lower lakes, and that river is a boundary waterway between the United States and Canada, and while it is possible that all the waters of said river may not be needed to pass through locks and canals to raise and lower vessels, the absolute control of all of the same and the submerged land beneath is necessary to protect navigation in said upper lake and those below, and it can not be determined that the taking of one portion for the purposes of navigation (locks and canals) is actual, present, and direct, and the remainder is constructive, secondary, and incidental.

If it is the law that a court can determine the needs of navigation, then the sufficiency or propriety of the plans of the Government by its corps of skilled engineers for improvement of the same should be submitted for its approval and, under some circumstances, submitted to a jury.

C.

The court erred in concluding and finding as a matter of law, as concluded and found in conclusion of law numbered seven, viz:

> For the taking of the submerged land and the flow of the water directly necessary under the previous paragraph, there can be no compensation; for that as to which only the incidental necessity exists, compensation must be paid.

There are no incidental necessities connected with the navigation of the Great Lakes and the waters. Every inch of each is all-important to the other, for the lowering or diverting carried on in one must necessarily be to the detriment of the others; for example, the channels in the Detroit River which have been created at a cost of more than eleven million of dollars, and if the upland owner is to be compensated all along the lakes and rivers when Congress chooses to exercise its powers of control, then there is not enough money to make compensation, and such control might just as well be given up.

"It is for Congress to determine whether, under the circumstances of a particular case, justice requires that compensation be made to a person or corporation incidentally suffering from the exercise by the National Government of its constitutional powers" (*Union Bridge Co.* v. *United States*, 204 U. S., 403), and in this case Congress made no appropriation or provided in its act for compensation for the waters

of or submerged land in the St. Marys River, the same not being "private property" within the meaning of the fifth amendment to the Constitution.

CXIV.

The court erred in concluding and finding as a matter of law, as concluded and found in conclusion of law numbered thirty-three, viz:

> Water sufficient to develop 6,500 theoretical horsepower is to be considered as surplus water capable of producing power, for which compensation should be awarded to the Chandler-Dunbar Company in the proceeding.

"The public, being the owners of the river, have an unquestionable right to improve the navigation of it, without any liability for remote and consequential damages to individuals" (*Hollister* v. *The Union Co.*, 9 Conn., 444; *C., B. & Q. Ry.* v. *Drainage Comrs.*, 200 U. S., 561; and *Lansing* v. *Smith*, 8 Cowen, 146), and, as Congress has declared all of the waters of said river are needed for navigation, and waters connected therewith, there can be no surplus water, and if there is surplus water it is public property, and—

> The jurisdiction of the General Government over interstate commerce and its natural highways vests in that Government the right to take all needed measures to preserve the navigability of the navigable watercourses of the country even against State action.
> *United States* v. *Rio Grande Irrigation Co.* (174 U. S., 703).

What water is surplus beyond the needs of navigation, if any, is not a judicial question but one to be determined by Congress upon investigation of experts as to the requirements of navigation.

CXXII.

Awards.

The court erred in awarding to the respondent, Chandler-Dunbar Water Power Company, on account of the said first description, the sum of ten thousand ($10,000) dollars by reason of its desirability for lock and canal purposes, and the sum of five thousand ($5,000) dollars in connection with the land along the rapids if used as a part of the development of 6,500 horsepower. (Sec. 161.)

As a matter of law the governmental necessities to have the said lands for the purpose of erecting thereon canals and locks and other public works in aid of navigation and incident thereto, pursuant to the execution of the power of Congress to regulate interstate and international commerce, are not an element of value to be included in making up the amount of compensation due the owner of said lands and is not an increment of value in said property to which the private owner is entitled, and as against the United States the Chandler-Dunbar Water Power Company is not the owner of an absolute vested right to develop water power in connection with land along the rapids for which compensation should be paid, and said lands have no value for such use.

CXXIV.

> The court erred in including in the award to the respondent, the Chandler-Dunbar Water Power Company, on account of the second description, the sum of five hundred and fifty thousand ($550,000) dollars for water power appurtenant to said upland.

There can not be an award of $550,000 or any sum for water power, for—

> The navigable waters of the United States, with their beds, for the purpose of commerce and navigation, being the "public property of the Nation," when any portion of this property is required by the United States for its uses in aid of navigation there is no condemnation necessary. It is only necessary for Congress to "order" the taking of the part needed for the specified use. An appropriation act naming the river or harbor to be improved and appropriating the necessary money is sufficient.
>
> *Hawkins' Point Light House Case* (39 Fed. Rep., 83).

"No riparian owner has any title to the waters but a simple usufruct as it passes along his land" (*Minn. L. & T. Co.* v. *St. A. Falls W. P. Co.*, 85 N. W., 523, and *Union M. & M. Co.* v. *Feris*, 2 Sawyer, 191), and such usufruct is subordinate to the public right and is not private property for which compensation should be made (Matter of Com'rs State Reservation, 37 Hun., 545, 546).

The award of $550,000 is not made upon impounded water of sufficient amount to develop 6,500

horsepower (4,500 electrical), for the court says (Rec., 419) so much water in cubic second-feet has not yet passed through the company's headrace and could not in its present form, and that some enlargement of the head opening would be necessary.

A witness for the Chandler-Dunbar Water Power Co. testified (Rec., 200):

> Under the present unit with the present wheels on 9½-foot head this plant produces about 900 horsepower. * * * There are in there now four units and you can put in five more. With the five more added, with present conditions of headrace, you could get 2,000 electrical horsepower.

The court below, according to the testimony on behalf of the defendant, has made an award for a surplus horsepower of 2,500 more than the development was expected to produce (electrical) and 3,600 horsepower more than is actually being developed. All water beyond 2,000 horsepower is simply passing over the submerged land claimed by the defendant, there being no development to use it and 3,600 horsepower for which an award is made is not being used.

Whatever private rights may be claimed by the defendant are subordinate to the public right. In *Scranton* v. *Wheeler* (57 Fed. Rep., 813) Judge Lurton said:

> The plaintiff holds the naked legal title, and with it he takes such proprietary rights as are consistent with the public right of navigation and the control of Congress over that right.

As against the United States, as a matter of law, at the time of taking, the Chandler-Dunbar Water Power Company was not the owner of an absolute vested right of the amount of water power found by the court or any other water power in the St. Marys River which entitled it to any compensation or treatment as its absolute vested private property having value requiring compensation to it in these proceedings.

The Chandler-Dunbar Water Power Company owns and holds the title to such submerged lands as are appurtenant to its upland as trustee for the use and benefit of the public, which trust is indefeasible; that the beneficial right, title, and interest of the public in said submerged lands for which said indefeasible trust subsists is the public navigation right with all its incidents, which right with all its incidents upon these waters and in and to said submerged lands is a part of the public domain of the United States.

All of the submerged lands where the said water power physically exists has been appropriated by the United States under section 11 of the act of March 3, 1909, for the purpose of regulating and improving navigation on said St. Marys River and erecting structures upon the submerged lands for the purpose of improving and facilitating the navigation of the Great Lakes system, of which the said waters of the St. Marys River is a constituent part.

The right of the people of the United States in the exercise of its dominion over the waters of said river and the improving the same for its navigation

extends here from the southerly main shore of the river to the international boundary line and throughout the whole extent of the same.

It is a paramount right of the United States so to take, appropriate, control, and use said submerged lands, which right of taking and appropriating it may exercise through Congress at such times and by such ways and means as the discretion of Congress directs. That it may occupy the bed of the stream for its structures in direct aid of navigation thereto or leave the whole river open waters and permit no power developments to be erected therein and the exercise of such discretion in the regulation of navigation in such ways and means as Congress sees fit to use, is not subject to control, limitation, or interference by the discretion of the Federal judiciary. It is a sovereign, legislative prerogative of the people over their public domain delegated by the people exclusively to Congress in the third clause of Article I, section 8, of the Constitution, giving it authority to regulate interstate and international commerce.

The said water power so found to be the absolute private property of the Chandler-Dunbar Water Power Company, for which the sum of $550,000 is awarded, is not to be treated in these proceedings as private property within the meaning of the fifth amendment to the Federal Constitution, requiring compensation before its taking, appropriation, and use.

At the time of taking, the Chandler-Dunbar Water Power Company had no grant, permit, or license

from the United States giving it a vested right, title, or interest in and to the bed of the stream, or the usufruct of the waters for the purpose of entering the river and erecting power developments therein.

All its previously existing permits had been revoked by the Secretary of War before the filing of the petition herein; all of said permits were revocable on their face at the pleasure of the Secretary of War and conferred no vested right, title, or interest in and to said company of the public navigation right and dominion in said river, or adverse thereto, or any right to compensation by reason of their revocation.

Section 11 of the said act of March 3, 1909, on its face revoked all of said permits previously existing.

For the Chandler-Dunbar Water Power Company at any time to enter the said river and erect any structures on the submerged lands without the permission of the United States would constitute *per se* a public nuisance in said river and would be a misdemeanor within the meaning of sections 9, 10, and 12 of the act of March 3, 1899.

The said premises to which said 6,500 theoretical horsepower is physically appurtenant is abutted by Government lands on all sides, except facing the river, and the said company has no way of necessity across the said Government lands, and without such way said lands are without value for power development by any private shore owner.

The barren fee simple title to the submerged lands encumbered by such indefeasible trust for the benefit of the public, as a matter of law, is negligible value

when the dominant estate of the public in said trust is exercised, as it has been here by the action of Congress.

Congress did not intend to award compensation for the usufruct of said waters or the potential water power therein.

In the installation in part in said river bed appurtenant to these uplands of public works of the Government primarily intended by Congress as improvements of the methods of navigation on said river in connection with the Great Lakes system, devised and constructed pursuant to the provisions of sections 11 and 12 of the act of March 3, 1909, if there be found from time to time a quantity of water which may be availed of for developing power it is competent for the Government to conserve and lease or use the said power from economic policy of preventing waste of natural resources. (*Kaukauna Case*, 142 U. S., 281–282–283–286.) Such conservation furnishes no ground for the owner of the barren title to the submerged lands to claim or be entitled to compensation for any power thus incidentally developed or possible of being so developed.

The taking and appropriation of the river bed of St. Marys River at the Falls, having in view the primary object of constructing and operating works therein for the regulation of navigation and an incidental development of power pursuant to said act, is not a taking of private property without compensation within the meaning of the fifth amendment, and the Government may use or lease such possible

surplus water power so developed by its own works primarily in aid of navigation and apply the proceeds to the Public Treasury.

CXXV.

The court erred in including in said award to the respondent, the Chandler-Dunbar Water Power Company, on account of said second description the sum of eighteen thousand six hundred ($18,600) dollars as a value for a factory site in connection with the development of 6,500 horsepower.

As a matter of law, the Chandler-Dunbar Water Power Company can have no rights as against the United States in and to the water appurtenant to the uplands, for which compensation should be paid in view of the paramount right and dominion of the Government over said waters, which are the public property of the Nation needed for commerce and navigation.

CXXVI.

The court erred in including in said award to the said respondent, the Chandler-Dunbar Water Power Company, on account of said second description the sum of twenty-three thousand two hundred and fifty ($23,250) dollars value in connection with the probability that said lands would be needed for lock and canal or bridge purposes.

The fact that it is desirable for use for lock and canal or bridge purposes can not give additional value because, as a matter of law, the governmental

necessity to have the said lands for the purpose of erecting thereon canals and locks or other public works in aid of navigation and incident thereto, pursuant to the execution of the power of Congress to regulate interstate and international commerce, is not an element of value to be included in making up the amount of compensation due the owner of said lands and is not an increment of value on said property to which the private owner is entitled.

There is not a scintilla of evidence in the case that the location of a bridge site on said property is contemplated by anyone having power or authority to execute such a project, and Congress has not given consent to anyone to erect a bridge which could not be done without such consent.

CXXIX.

> The court erred in including in the value of the sixth description and in awarding to said sixth description the sum of five thousand ($5,000) dollars by reason of its suitability for lock and canal purposes. (Island No. 5.)

In the case of *Gilmer* v. *Lime Point* (19 Cal., 47) the court held, relating to the acquisition of land for a fort (p. 53), "that any market value the premises might have peculiarly as a site for fortifications, if they could have any such, could be predicated only upon their susceptibility of being made the instrument of obtaining from the Government more than the value of the same for purposes to which an individual might apply the same; and that it was

against the policy of the law to recognize any such value as an element of the aggregate value of the premises, both on the score of morality and public economy."

CXXX.

The court erred in awarding to said sixth description a strategic value of fifteen thousand ($15,000) dollars.

"Strategy" is a term ordinarily used in the operations of armies, "and is not very appropriate to the transactions of civil life."

Fortune v. *Watkins* (94 N. C., 317).

A strategic value is a speculative value upon which an award can not be based.

Shoemaker v. *United States* (147 U. S., 305). *Kerr* v. *South Park Comm.* (117 U. S., 305).

CXXXII.

The court erred in awarding and allowing five per cent upon said award or upon any part thereof after January 1, 1910.

As a general rule, the United States does not pay interest on any debts of the Government. The only exceptions are where the Government stipulates to pay interest, as in public loans, and where interest is given by act of Congress expressly, either by name of interest or by that of damages.

Opinions of the Attorneys General, vol. 7, p. 523.

Where no appropriation is made for payment of interest on a judgment of the Court of Claims

against the United States, interest can not lawfully be paid.

Opinions of the Attorneys General, vol. 20, p. 423.

The question of interest turns upon the intention of Congress, and as its act of March 3, 1909, made no mention of interest, it can not be lawfully awarded or paid.

IN CONCLUSION.

The Constitution, assented to by all of the States, gives to Congress the power to regulate commerce and to make all laws necessary to carry into execution that power, and that instrument declares the laws made thereunder shall be the supreme law of the land.

Commerce means exchange of goods—trade—which to carry on requires modes of transportation, the greatest of which is provided for by nature in the rivers, lakes, and streams of this country, above as well as below the flow of the tide. In aid of commerce Congress has certain powers over transportation by navigation within the limits of every State other than those in which they lie.

The navigable waters of the United States for all uses of navigation are public property of the Nation, subject to requisite legislation by Congress, and that body under its authority can close channels in rivers and streams, if by so doing the navigation of other parts of such waters are improved; may authorize subaqueous lands to be taken upon which to erect dikes, jetties, lighthouses, and bridge piers; can establish harbor lines and completely subject all other

rights to those of navigation. The power of Congress is supreme, and justly so, for the necessity, benefit, convenience, and public welfare of the entire country.

Formerly the dominion of the Government extended only to rivers or bodies of water flowed by the tides, but the decisions of the Supreme Court now hold that the same principles applied to tide waters are now equally applied to all navigable waters, for in this country all are deemed navigable which are really so.

It has been decided that the title to property is always held upon the implied condition that it must be surrendered to the Government when public necessities demand it, for whether title is in the State or private persons, it is always subject to the public right of navigation, and riparian owners of navigable waters must suffer the consequences of an improvement for the benefit of navigation ordered by Congress, though damages resulting therefrom can not be recovered as such losses, like casualties are incidental but unavoidable.

The bed of all navigable waters and rights therein are always acquired subject to a servitude in respect to navigation created in favor of the Federal Government by the Constitution. There has been repeated decisions by the Supreme Court that injuries sustained wholly in consequence of improvements made in aid to navigation are *damnun abusque injuria* or *injuria abusque damno*, for whatever interest a riparian owner has in submerged land in front of his upland bordering on public navigable waters, his

title is held at all times subordinate to the needs of navigation. It is a qualified interest, a bare technical interest, not at his absolute disposal as his upland, but is liable to public demands as well as the waters flowing over them.

The counsel for the plaintiff in the case of *Scranton* v. *Wheeler,* frankly admitted that compensation could not be demanded for the appropriation of submerged land in St. Marys River for a public purpose (179 U. S., 164), and in that case the Supreme Court decided that it was not intended that the paramount authority of Congress to improve the navigation of the public waters of the United States should be crippled by compelling the Government to make compensation to a riparian owner for injuries resulting from an improvement required by Congress.

The navigable waters of the United States, with their beds, for the purpose of commerce and navigation, being the public property of the Nation, do not come within the fifth amendment to the Constitution, which provides only that private property shall not be taken without just compensation, making no reference to public property, such as the waters of navigable streams.

In view of the many decisions of the highest Federal and State courts that all navigable waters and their beds, both above and below the flow of the tide, are public property of the whole people, and that the Government may take possession of such property, waters, and submerged lands, it is contended that the United States may acquire all of the waters and

subaqueous lands of the St. Marys River at Sault Ste. Marie, Mich., from the southern shore of that river to the international boundary line, for the purpose of improving navigation without becoming liable for or being required to make compensation to anyone.

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Attorney.

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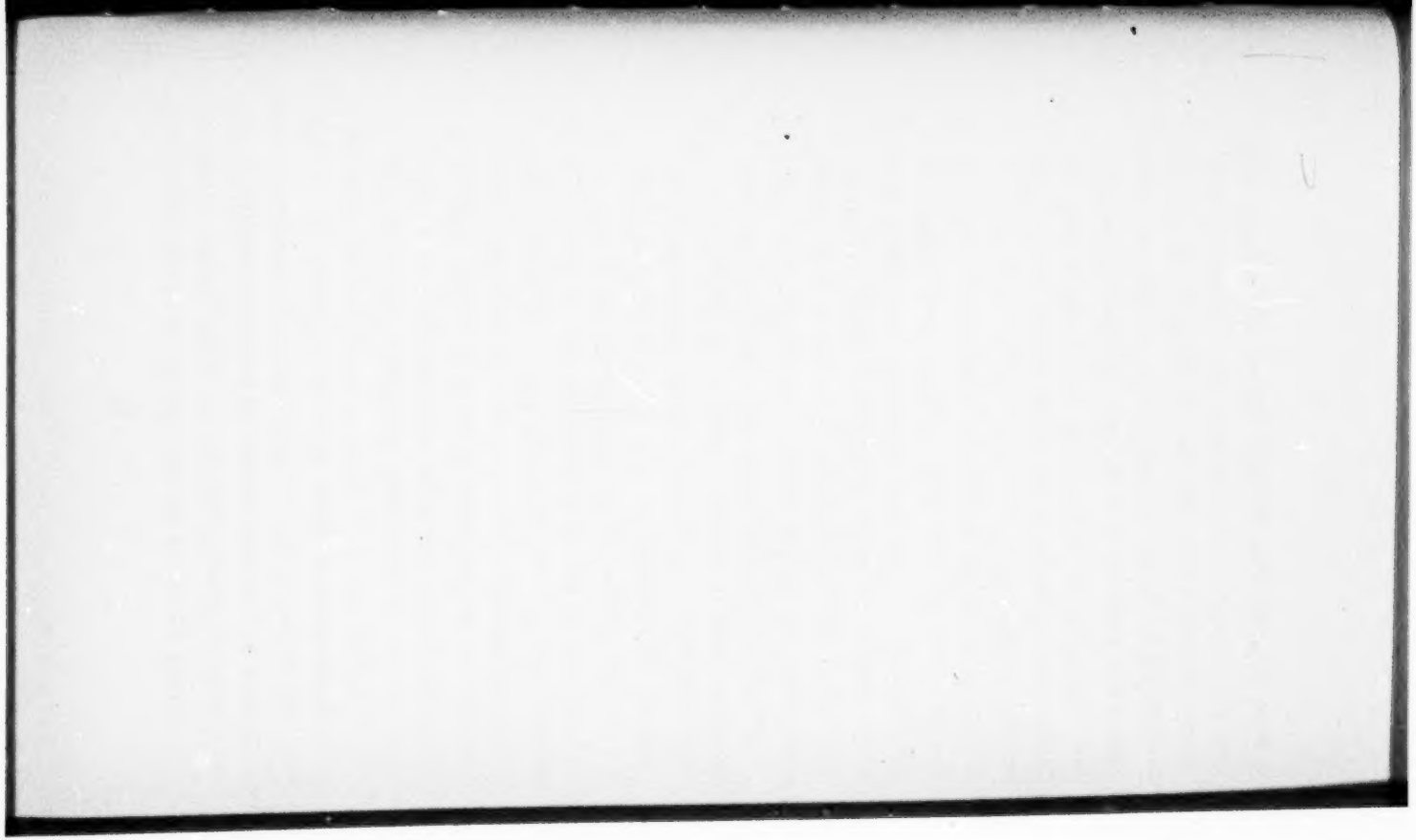

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In the Supreme Court of the United States.

OCTOBER TERM, 1912.

THE UNITED STATES, PLAINTIFF IN error, *v.* THE CHANDLER-DUNBAR WATER POWER Company et al.	No. 783.
THE CHANDLER-DUNBAR WATER POWER Company, plaintiff in error, *v.* THE UNITED STATES.	No. 784.
ST. MARY'S POWER COMPANY, PLAINTIFF in error, *v.* THE UNITED STATES.	No. 785.
CLARENCE M. BROWN, SOLE RECEIVER of the Michigan Lake Superior Power Company, plaintiff in error, *v.* THE UNITED STATES.	No. 786.

IN ERROR TO THE DISTRICT COURT OF THE UNITED STATES FOR THE WESTERN DISTRICT OF MICHIGAN.

SUPPLEMENTAL AND REPLY BRIEF AND ARGUMENT ON BEHALF OF THE UNITED STATES.

IMPORTANCE OF PRINCIPLES INVOLVED.

This case is important, not so much because of the a mount of money involved, although that is considerable, as on account of the principles to be considered and determined. The people of this country have always regarded the development of its internal commerce as a matter of the most vital importance; and hence this court has always given the most liberal construction to the commerce clause of the Constitution. Congress has demonstrated the same spirit by, from session to session, making the most liberal appropriations for the improvement of our harbors, rivers, and especially the streams connecting the Great Lakes, which form a highway for a commerce marvelous in its present extent, and whose future can only be imagined but not estimated. Shall these improvements be seriously hampered or their prosecution to a great extent be practically prohibited by permitting those who have heretofore acquired lands along our navigable streams for a mere pittance to exact from the Government enormous sums for the privilege of putting these waterways in the best condition for handling commerce? The mandates of the Constitution must, of course, be obeyed; but the courts, it is submitted, should not strain that instrument in order to protect a supposed private right to the great detriment of the public interest.

I.

It was within the power of Congress to declare that the ownership of all properties lying between the canal and the boundary line is essential for the purposes of navigation, and to require the removal of all obstructions from all parts of the stream lying within the United States, and Congress having spoken it is not for the courts to decide whether any part of said waters may be used for private purposes.

The portions of the act of Congress here material are paragraphs 1, 7, and 8 of section 11, act of March 3, 1909 (ch. 264, 35 Stat., 820, 821), which read as follows:

> That the ownership in fee simple absolute by the United States of all lands and property of every kind and description north of the present Saint Marys Falls Ship Canal throughout its entire length and lying between said ship canal and the international boundary line at Sault Sainte Marie, in the State of Michigan, is necessary for the purposes of navigation of said waters and the waters connected therewith.
>
> * * * * *
>
> Every permit, license, or authority of every kind, nature, and description heretofore issued or granted by the United States, or any official thereof, to the Chandler-Dunbar Water Power Company, the Edison Sault Light and Power Company, the Edison Sault Electric Company, or the Saint Marys Power Company, shall cease and determine and become null and void on January first, nineteen hundred and eleven, and the Secretary of War is hereby authorized

and instructed to revoke, cancel, and annul every such permit, license, or authority, to take effect on January first, nineteen hundred and eleven.

The Secretary of War may, in his discretion, permit the Chandler-Dunbar Water Power Company and the Edison Sault Electric Company to maintain their present works and utilize the water power in said river at said rapids, in so far as the same does not interfere with navigation, or retard the construction of Government works in said river, under such rules or regulations as have been or hereafter shall be imposed by the Secretary of War, until they shall be paid the compensation awarded by the court for their property condemned under the provisions of this section; but said permit shall not extend beyond January first, nineteen hundred and eleven.

The revocation by Congress of the licenses which previously existed was equivalent to a positive declaration that all obstruction within the river is illegal.

In *Bridge Company* v. *United States* (105 U. S., 470, 480) it appeared that Congress had assented that a bridge across the Ohio River at Cincinnati might be constructed in accordance with the terms of a charter conferred by the State law, reserving, however, the right of withdrawal of its assent thereto or to direct necessary modifications. While the bridge was in course of construction Congress by statute declared it unlawful to proceed therewith unless certain specified changes were made. The company thereafter completed the bridge according to the

altered plans, and brought suit against the United States for damages. In the course of its opinion the court, speaking through Chief Justice Waite, said:

> From this we conclude that the withdrawal by Congress of its assent to the maintenance of the bridge, when properly made, *is, for all the purposes of this case, equivalent to a positive enactment that from the time of such withdrawal the further maintenance of the bridge shall be unlawful, notwithstanding the legislation of the several States upon the subject.* If modifications are directed, assent is, in legal effect, withdrawn, unless the required changes are made.
>
> It is contended, however, that under the terms of the reservation the assent of Congress could not be withdrawn until it had been in some way judicially ascertained that the bridge, as authorized, either did in fact, or would if built, substantially and materially obstruct free navigation. Such, we think, is not the fair meaning of the language employed. In *State of Pennsylvania* v. *The Wheeling, etc., Bridge Co.* (13 How., 518) it was judicially settled in this court that a bridge as constructed did illegally interfere with navigation; but when afterwards Congress, in the exercise of its constitutional authority to regulate commerce, legalized the structure by a legislative enactment, the court held (18 How., 421) that this act of legislative power removed the objection to the further continuance of the bridge, be-

> cause, in the opinion of the legislative department of the Government, the obstruction which had been erected was no more than those interested in navigation should submit to for the general good.

Hence, in the present case, the legal status of the Chandler-Dunbar Water Power Company is precisely the same as if Congress had declared by positive enactment that a further use of the waters of the St. Marys River by that company or its lessee would be unlawful; and the right to make such a declaration with reference to a navigable stream, it is submitted, rests in Congress, and the courts are not authorized to treat such a declaration as a nullity.

This contention is supported by the following authorities: *Wilson* v. *Black Bird Creek Marsh Company* (2d Peters, 245, 251) involved the right of a party acting by authority of the legislature to construct a dam across a stream which lay wholly within the State of Delaware, but which was navigable and connected with navigable waters of the United States. The court held that inasmuch as Congress had not assumed control over this stream the legislature had the power to authorize the construction of the dam, using the following language:

> But the measure authorized by this act stops a navigable creek, and must be supposed to abridge the rights of those who have been accustomed to use it. But this abridgment, unless it comes in conflict with the Constitution or a law of the United States,

> is an affair between the government of Delaware and its citizens, of which this court can take no cognizance.

Pound v. *Turck* (95 U. S., 459, 464) was an action for damages arising from the breaking of a raft against a dam and boom located, by authority of an act of the legislature, in a stream situated in Wisconsin. The court held that the case fell within the principle of the Black Bird Creek case; but in speaking of the development of the utility of smaller streams lying within the State which connect with large streams, the court said:

> But to the legislature of the State may be most appropriately confided the authority to authorize these structures where their use will do more good than harm, and to impose such regulations and limitations in their construction and use as will best reconcile and accommodate the interest of all concerned in the matter. And since the doctrine we have deduced from the cases recognizes the right of Congress to interfere and control the matter whenever it may deem it necessary to do so, the exercise of this limited power may all the more safely be confided to the local legislatures.

According to these cases, any small navigable streams lying wholly within a State, unless Congress has undertaken to exercise control thereover, *are subject absolutely, so far as their navigability is concerned, to the control of the legislature, that body having the power, if necessary, to close them up entirely.*

In *South Carolina* v. *Georgia* (93 U. S., 4, 10) the facts were that for some distance the Savannah River was the boundary line between those two States; that at a certain point it consisted of two branches; that under direction of the Secretary of War and by the concurrence of the State of Georgia the South Carolina branch was being obstructed in order to create a greater flow of water through the Georgia branch, and the State of South Carolina sought to enjoin the further obstruction of its branch of the stream. The court held that Congress had plenary power over the matter, and in the course of its opinion said:

> Prior to the adoption of the Federal Constitution the States of South Carolina and Georgia together had complete dominion over the navigation of the Savannah River. By mutual agreement they might have regulated it as they pleased. It was in their power to prescribe, not merely on what conditions commerce might be conducted upon the stream, but also how the river might be navigated, and *whether it might be navigated at all.* They could have determined that all vessels passing up and down the stream should pursue a defined course and that they should pass along one channel rather than another, where there were two. They had plenary authority to make improvements in the bed of the river, to divert the water from one channel to another, and to plant obstructions therein at their will. This will not be denied; *but the power to "regulate commerce,"*

conferred by the Constitution upon Congress, is that which previously existed in the States.

Gilman v. *Philadelphia* (3d Wallace, 713, 724, 731) involved the right of Philadelphia acting under a State statute to erect over the Schuylkill River a bridge which interfered with its navigation. The court held that inasmuch as Congress had not undertaken to regulate the navigation of this stream the construction of the bridge was lawful, but said:

> Commerce includes navigation. The power to regulate commerce comprehends the control for that purpose, and to the extent necessary, of all the navigable waters of the United States which are accessible from a State other than those in which they lie. For this purpose they are the public property of the Nation, and subject to all the requisite legislation by Congress. This necessarily includes the power to keep them open and free from any obstruction to their navigation, interposed by the States or otherwise; to remove such obstructions when they exist; and to provide, by such sanctions as they may deem proper, against the occurrence of the evil and for the punishment of offenders. *For these purposes Congress possesses all the powers which existed in the States before the adoption of the national Constitution, and which have always existed in the Parliament in England.*
>
> *It is for Congress to determine when its full power shall be brought into activity, and as to the regulations and sanctions which shall be provided.*
>
> * * * * *

> *Lastly, Congress may interpose, whenever it shall be deemed necessary, by general or special laws. It may regulate all bridges over navigable waters, remove offending bridges, and punish those who shall thereafter erect them. Within the sphere of their authority both the legislative and judicial power of the Nation are supreme. A different doctrine finds no warrant in the Constitution, and is abnormal and revolutionary.*

In *Pennsylvania* v. *Wheeling & Belmont Bridge Company* (13 Howard, 518, 578) the court enjoined the further construction of a bridge across the Ohio River, and with reference to the character of construction that would be lawful this court found the facts to be as follows:

> Believing, from the estimates in the case, that the obstruction to the navigation of the river may be removed by elevating the bridge, at an expense which, when added to the original cost, will leave a reasonable profit to the stockholders, on the entire capital expended, we have endeavored to ascertain the lowest point of elevation which will secure this object. And, on a full view of the evidence, we are brought to the conclusion that an elevation of the lowest parts of the bridge for three hundred feet over the channel of the river, not less than one hundred and eleven feet from the low-water mark, will be sufficient—the flooring of the bridge descending from the termini of the elevation at the rate of four feet in the hundred; this will give a level headway for boats of three hundred feet in width and

> will enable those whose chimneys are eighty feet high to pass under the bridge when the water is thirty feet deep from the ground, leaving the tops of the chimneys two feet below the lowest parts of the bridge. If this or some other plan shall not be adopted which shall relieve the navigation from obstruction, on or before the 1st day of February next, the bridge must be abated.

After this decision had been handed down Congress passed an act wherein it was declared that the bridges across the Ohio River at Wheeling, in the State of Virginia, and at Bridgeport, in the State of Ohio, abutting on Zanes Island, in said river, were lawful structures in their present positions and elevations as then existing, and should be so held and taken to be, anything in the law or laws of the United States to the contrary notwithstanding, and also declared them to be post roads for the passage of the mails of the United States. A bill was thereafter filed seeking to carry into execution the former decree, and the case came before this court on motion. (18th Howard, 421, 430, 432.) In speaking of the effect of this act the court said:

> So far, therefore, as this bridge created an obstruction to the free navigation of the river, in view of the previous acts of Congress, they are to be regarded as modified by this subsequent legislation; *and, although it still may be an obstruction in fact, is not so in the contemplation of law.* We have already said, and the principle is undoubted, that the act of the Legislature of Virginia conferred full authority to

> erect and maintain the bridge, subject to the exercise of the power of Congress to regulate the navigation of the river. *That body having, in the exercise of this power, regulated the navigation consistent with its preservation and continuation, the authority to maintain it would seem to be complete. That authority combines the concurrent powers of both Governments, State and Federal, which, if not sufficient, certainly none can be found in our system of government.*
>
> We do not enter upon the question, whether or not Congress possess the power, under the authority in the Constitution, "to establish post offices and post roads," to legalize this bridge; for, conceding that no such powers can be derived from this clause, it must be admitted that it is, at least, necessarily included in the power conferred to regulate commerce among the several States. *The regulation of commerce includes intercourse and navigation, and, of course, the power to determine what shall or shall not be deemed in judgment of law an obstruction to navigation; and that power, as we have seen, has been exercised consistent with the continuance of the bridge.*

In drawing analogy between its holding in that case and the principles applied to streams subject to State control, the court said:

> A class of cases that have frequently occurred in the State courts contain principles analogous to those involved in the present case. The purely internal streams of a State which are navigable belong to the riparian owners to the thread of the stream,

and, as such, they have a right to use the waters and bed beneath for their own private emolument, subject only to the public right of navigation. They may construct wharves or dams or canals for the purpose of subjecting the stream to the various uses to which it may be applied, subject to this public easement. But, if these structures materially interfere with the public right, the obstruction may be removed or abated as a public nuisance.

In respect to these purely internal streams of a State, the public right of navigation is exclusively under the control and regulation of the State legislature; and in cases where these erections or obstructions to the navigation are constructed under a law of the State, or sanctioned by legislative authority, they are neither a public nuisance subject to abatement, nor is the individual who may have sustained special damage from their interference with the public use entitled to any remedy for his loss. *So far as the public use of the stream is concerned, the legislature having the power to control and regulate it, the statute authorizing the structure, though it may be a real impediment to the navigation, makes it lawful.* (5 Wend., 448, 449; 15 ib., 113; 17 T. R., 195; 20 ib., 90, 101; 5 Cow., 165.)

No case could possibly show more strongly the power of Congress over navigable streams and the want of power in the courts to interfere with Congress in its regulation of such streams than these two decisions. This court first expressly found that the bridge as constructed materially

interfered with navigation, and hence was an impediment to interstate commerce; but in the face of this express adjudication Congress declared that the bridge was lawfully constructed, and the court held thereafter that the power of Congress was plenary and its declaration could not be questioned.

A case presenting a similar state of facts was the Clinton Bridge (10 Wall., 454, 463). That action had been brought to enjoin a railroad company from constructing a bridge over the Mississippi River. While the case was pending Congress passed an act declaring that the bridge was a lawful structure and also declaring it a post route. With reference to the effect of this act, this court said:

> In the present case the act of Congress having passed pending the suit, it gave the rule of decision for the court at the final hearing upon the same principle that the act in the Wheeling Bridge case staid the execution of the decree directing its abatement.

That is, it was incumbent on the court to adjudge as Congress had directed, regardless of whether the navigation of the stream was impaired in fact by the bridge or not.

Wisconsin v. *Duluth* (96 U. S., 379, 383, 387) involved the power of Congress to construct across a neck of land a canal, which might change to some extent the flow of the St. Louis River to the alleged injury of the State of Wisconsin. The court, speaking through Mr. Justice Miller, said:

> For many years past Congress has been in the habit of passing an annual appropriation

bill, called the river and harbor bill, devoted to works of this class exclusively; and in these bills it appropriates specific sums to specific works, either already commenced and unfinished, or for new works thereby authorized, or sums necessary for the safety and protection of works already in existence. The money thus appropriated is expended, as we have said, under the direction of the War Department. *It can not be necessary to say that when a public work of this character has been inaugurated or adopted by Congress, and its management placed under the control of its officers, there exists no right in any other branch of the Government to forbid the work or to prescribe the manner in which it shall be conducted.*

* * * * *

If, then, Congress, in the exercise of a lawful authority, has adopted and is carrying out a system of harbor improvements at Duluth, this court can have no lawful authority to forbid the work. If that body sees fit to provide a way by which the great commerce of the lakes and the countries west of them, even to Asia, shall be securely accommodated at the harbor of Duluth by this short canal of three or four hundred feet, can this court decree that it must forever pursue the old channel, by the natural outlet, over water too shallow for large vessels, unsafe for small ones, and by a longer and much more tedious route?

When Congress appropriates $10,000 to improve, project, and secure this canal, this court can have no power to require it to be filled up and obstructed. While the engineering offi-

> cers of the Government are under the authority of Congress, doing all they can to make this canal useful to commerce and to keep it in good condition, this court can owe no duty to a State which requires it to order the city of Duluth to destroy it.

Cherokee Nation v. *Kansas City Railway Company* (135 U. S., 641, 657) involved the power of Congress to authorize the exercise of the right of eminent domain through the lands belonging to the Cherokee Nation. The railroad company to which such authority was granted was a State corporation, and it was insisted that the objects for which the act was passed were not such as admitted of the exercise of the right of eminent domain; but the court, speaking through Mr. Justice Harlan, said:

> The railroad which the defendant was authorized to construct and maintain will have, if constructed and put into operation, direct relation to commerce with the Indian tribes, as well as with commerce among the States, especially with the States immediately north and south of the Indian Territory. It is true that the company authorized to construct and maintain it is a corporation created by the laws of a State, but it is none the less a fit instrumentality to accomplish the public objects contemplated by the act of 1884. Other means might have been employed, but those designated in that act, although not indispensably necessary to accomplish the end in view, are appropriate and conducive to that end, and, therefore, within the power of Congress to adopt.

Scranton v. *Wheeler* (179 U. S., 141, 162) was an action brought to recover damages arising to the owner of land fronting on a navigable river from obstructing his access to the river by the construction of a pier in the river under authority of Congress for the purpose of improving navigation. In speaking of the power of Congress over navigable streams this court said:

> All the cases concur in holding that the power of Congress to regulate commerce, and therefore navigation, is paramount and is unrestricted except by the limitations upon its authority by the Constitution. Of course, every part of the Constitution is as binding upon Congress as upon the people. The guaranties prescribed by it for the security of private property must be respected by all. *But whether navigation upon waters over which Congress may exert its authority requires improvement at all, or improvement in a particular way, are matters wholly within its discretion;* and the judiciary is without power to control or defeat the will of Congress so long as that branch of the Government does not transcend the limits established by the supreme law of the land.

To the same effect see *Green Bay & Mississippi Canal Co.* v. *Patten Paper Co.* (172 U. S., 58, 80).

McCray v. *United States* (195 U. S., 27, 53) involved the validity of an excise tax upon oleomargarine, and in declaring that the courts have no right to set any limitation upon congressional power when legislating with reference to matters over which Congress is vested with authority, this court, speaking

through Mr. Justice (now Mr. Chief Justice) White, said:

> Whilst, as a result of our written Constitution, it is axiomatic that the judicial department of the Government is charged with the solemn duty of enforcing the Constitution, and therefore, in cases properly presented, of determining whether a given manifestation of authority has exceeded the power conferred by that instrument, no instance is afforded from the foundation of the Government where an act, which was within a power conferred, was declared to be repugnant to the Constitution because it appeared to the judicial mind that the particular exertion of constitutional power was either unwise or unjust. To announce such a principle would amount to declaring that in our constitutional system the judiciary was not only charged with the duty of upholding the Constitution but also with the responsibility of correcting every possible abuse arising from the exercise by the other departments of their conceded authority. So to hold would be to overthrow the entire distinction between the legislative, judicial, and executive departments of the Government upon which our system is founded, and would be a mere act of judicial usurpation.
>
> It is, however, argued, if a lawful power may be exerted for an unlawful purpose, and thus by abusing the power it may be made to accomplish a result not intended by the Constitution, all limitations of power must disappear, and the grave function lodged in the judiciary to confine all the departments within

> the authority conferred by the Constitution will be of no avail. This, when reduced to its last analysis, comes to this: That because a particular department of the Government may exert its lawful powers with the object or motive of reaching an end not justified, therefore it becomes the duty of the judiciary to restrain the exercise of a lawful power wherever it seems to the judicial mind that such lawful power has been abused. But this reduces itself to the contention that under our constitutional system the abuse by one department of the Government of its lawful powers is to be corrected by the abuse of its powers by another department.

But one conclusion can be drawn from the above-cited decisions of this court, and that is that the regulation and control of navigable streams is within the exclusive power of Congress, and that it may conclusively determine the character of improvements that may be placed in such streams, may entirely close such streams from navigation, and may declare all parts thereof essential to proper navigation thereof, and that any conclusion that Congress may reach with reference to such matters can not be questioned by the courts. Hence, when Congress declared that the ownership of all property between the canal and the Canadian border was necessary for the purposes of navigating the waters of the St. Marys River and the waters connected therewith, and revoked all licenses which previously had been granted for placing any kind of obstructions in that stream, it was a

conclusive mandate that all the waters flowing through the St. Marys River at that point should be left free, and that no portion thereof should thereafter be appropriated for private purposes.

II.

If the courts had any power to question the correctness of the congressional declaration that all of the waters of the St. Marys River at the point in question were essential for the purposes of navigation, the findings of fact by the court below, together with the scope of the legislation, conclusively show that such assertion of Congress was amply justified.

The ninth paragraph of section 11 of the said act of Congress reads as follows:

> The President of the United States is respectfully requested to open negotiations with the Government of Great Britain for the purpose of effectually providing, by suitable treaty with said Government, for maintaining ample water levels for the uses of navigation in the Great Lakes and the waters connected therewith by the construction of such controlling and remedial works in the connecting rivers and channels of such lakes as may be agreed upon by the said Governments under the provisions of said treaty.

The findings of fact by the court which bear upon this question are as follows:

> IX. No question exists as to the necessity for taking the dry land. It will all be directly required for the proposed locks, canal, and fore bay, and use for these purposes is use for navi-

gation. As to the submerged lands out to the boundary the matter is not so clear. A large part is clearly not directly necessary at present for the needs of navigation; but such part is so connected with and incidental to the other directly and presently necessary portion as to be affected by and brought within the same pervading necessity and as to make it proper for Congress to take the whole.

As to all the property described, a necessity for taking for public use exists, as a matter of fact.

The necessity for taking all, as applied to the facts here, is a necessity of peculiar character. It may be called a constructive, as distinguished from an actual, necessity. As to the excess beyond a certain amount of land and water, the taking is secondary and incidental to the taking of the primary body now needed. (R., pp. 81, 82.)

XI. The amount of water flowing out of Lake Superior depends, primarily, upon the height of the lake, and this has fluctuated over a margin of about 3 feet during the past 50 years. During the 47-year period ending 1907 the average flow was about 80,000 c. s. f.; for the 25-year period ending with 1909, about 75,000 c. s. f. For the years 1907–8–9 the average flow was slightly above 64,000 c. s. f., and this is the proper measure for this case.

The general well-known alarm about lowering lake levels, and fear of still lower, would, in the mind of an intending purchaser and his advising engineers, counterbalance the theoretical possibility of rising levels. (R., p. 82.)

XVI. The amount of commerce passing the rapids is beyond comparison with any other analogous waterway in the world. Indeed, perhaps, there is no analogous waterway. A high estimate of the value of the entire flow of the river for power would not exceed two million dollars per year, while the value of the river to the public, as a commercial waterway, is, doubtless, fifty times that amount. In the ordinary power stream the element of navigation is dormant and insignificant; here it is active and overwhelming, and it is the power element which is comparatively insignificant. (R., p. 83.)

XVII. The increase in navigation has been on geometrical ratio. The dream of one decade has been the reality of the next. One lock, planned for all future needs, has become inadequate before it was finished. We can fix what seem to be the maximum future limitations for this commerce; but such estimates may be as inaccurate as were those made 25 years ago. (R., p. 83.)

XIX. Additional locks, canals, forbays, etc. (beyond the third lock), can be built to advantage only upon the submerged land. Congress might think best to provide a large number of locks so that the great blockades which occasionally occur could be cleared away in a few hours, although most of the locks would be idle most of the time. It is conceivable, though improbable, to suppose that structures of this class will eventually occupy all the space not needed to pass floatable products. Then the surplus water must be diverted elsewhere. So, too, it is conceivable that Congress

might construct works farther down a stream, flowing this space with slack water and getting all the fall at a lower point. (R., pp. 83, 84.)

XX. The present use of the water in direct aid of navigation is only for filling and operating locks and for floating a few logs. The best expert judgment, both of the Waterways Commission and of the witnesses in this case, is that 4,000 c. s. f. is the maximum amount which will ever be needed for these purposes; and therefore the amount to be needed for navigation, so far as the same can now be definitely determined, must be fixed at this figure, leaving the balance beyond need for navigation. I think, however, that, owing to all the contingencies involved, it is impossible to fix this amount with sufficient certainty to make any definite finding of fact relating thereto, except as in this and in other paragraphs stated. (R., p. 84.)

XXI. Other methods of using the water in direct aid of navigation may be found, requiring more or all of the water. For example, smoothing out the bed could be made to give an even flow 5 feet deep, and up a part of such channel light-draft vessels could be hauled by the power generated from the water in the remainder of the channel. For further example, the whole power might be employed to operate a ship railway, transporting vessels around the rapids; or a floatable product may develop, requiring much of the width of the channel in order properly to be floated down. All of these examples are highly improbable, probably fantastic, but not more so than the present volume of this com-

merce or the present methods of transmitting this power would have been a few years ago. (R., p. 84.)

XXIII. The contemplated method of developing the whole power is by dam across the American part of the river and a dike up along the international boundary, and it might be well within the limits of proper discretion for the Government not to permit such a structure.

No reason has been shown, and I see none, why it would not be feasible for such a dam, under private ownership and management, to be fully subject to governmental control and regulation in all matters affecting navigation; such divided control might cause complications. *There is no clear authority therefor, and in the absence of further legislation the engineering officers might find room, within the limits of sound discretion and good faith, to refuse such a permit.* (R., pp. 84, 85.)

XXIV. From natural causes the lake levels fluctuate over periods of years and even from year to year. Artificial causes, like the Chicago Drainage Canal, contribute. Every additional foot of water that can be had is of immense value. It may be desirable to hold back the waters of Lake Superior to maintain or raise the level there, or it may be best to increase the discharge artificially for the benefit of the lower lakes. Both of these things have been done.

During part of every year, during recent years, the United States engineers have wholly stopped the flow of water through the Michigan-Lake Superior power canal, thus greatly lessening its value as a power producer. (R., p. 85.)

XXV. It is for the interest of a power plant in the rapids that the river flow shall be constant and that the fluctuations should be in Lake Superior. *It is for the interest of navigation in that lake that its level shall be constant and that the fluctuations shall be in the river flow.* (R., p. 85.)

XXVI. There are enthusiastic advocates of a plan for a series of dams in Niagara, Detroit, St. Clair, and St. Marys Rivers, giving slack-water navigation for vessels of 25-feet draft from Duluth to Buffalo. The execution of such a plan might, and probably would, obliterate this water power at this point and transfer it down the river. (R., p. 85.)

XXVII. However unlikely this last-named plan may be, it is agreed by all that controlling works, consisting of some kind of a dam across the entire St. Marys River, built and operated through some joint arrangement with Canada, and by which the level of Lake Superior and its outflow could be regulated, would be an extremely desirable thing for both countries, and of great value to the commerce of the upper and lower lakes. (R., p. 85.)

XXVIII. Such a structure I regard as within the fair limits of possibility in the not very distant future. Its erection, if at some other point, would incidentally destroy the power inchoate at this point, and if the erection was at this point there would be a physical occupation of a greater part or all of the Chandler-Dunbar submerged lands, and the water power produced would be in the nature of an incidental by-product of the main navigation use. (R., p. 86.)

In view of the vary rapid increase of commerce along this river, and the several methods mentioned by the court whereby the entire stream may be utilized for purposes of navigation, and especially in view of contemplated negotiations with Canada, which in all probability will result in the erection of controlling works jointly by the two countries, requiring the occupancy of the entire stream at this point or the destruction of this water power, it was certainly proper for Congress at this time to assume control of the river at this point from its southern bank to the boundary line.

III.

The revocation of the license to the Chandler-Dunbar Water Power Company and its exclusion from thereafter using any waters from the St. Marys River adjacent to the lands owned by it was not a taking of its property within the constitutional sense, and hence it was error to make any allowance for damages to said company in consequence thereof.

In the first place, the Chandler-Dunbar Water Power Company has no ownership in the water itself. This well-recognized principle was thus stated by this court in *Oklahoma* v. *Kansas Natural Gas Co.* (221 U. S., 229, 258):

> *Hudson County Water Co.* v. *McCarter* (209 U. S., 349) is urged, we have seen, on our attention. A statute of the State of New Jersey was involved, which made it unlawful for any person or corporation to transport or carry through pipes the waters of any fresh-water lake, river, etc., into any other State for use therein. Two propositions may be

said to be the foundation of the decision of the court below sustaining the statute: (1) "The fresh-water lakes, ponds, brooks, and rivers, and the waters flowing therein, constitute an important part of the natural advantages of the" State, "upon the faith of which its population has multiplied in numbers and increased in material welfare. The regulation of the use and disposal of such waters, therefore, if it be within the power of the State, is among the most important objects of government." (2) "The common law recognized no right in the riparian owner, as such, to divert water from the stream in order to make merchandise of it, nor any right to transport any portion of the water from the stream to a distance for the use of others." It was further declared that the common law authorized the acquisition of water "only by riparian owners, and for purposes narrowly limited. Not that the ownership is common and public." *And the contention was rejected that the title of the individual riparian owner was to the water itself—the fluid considered as a commodity—and exclusive against the public and against all persons excepting other riparian owners.*

Therefore, whatever right is possessed by the riparian owner is only one of user, and according to the authorities hereinafter cited this right is subservient to the right of the public to appropriate the entire water supply, or to exclude therefrom any riparian owner for navigation purposes, and when such appropriation or exclusion is made on

right of compensation arises therefrom to the riparian owner.

There are cases in which it was held that under the circumstances presented property was taken in a constitutional sense, and its owner was entitled to compensation. A sufficient number of these cases to illustrate the principles upon which they all rest will be first considered:

In *United States* v. *Lynah* (188 U. S., 445) it appeared that the officers and agents of the Government, acting under authority of Congress, had placed dams and other obstructions in the Savannah River in such manner as to hinder its natural flow and to raise the water so as to overflow the land of plaintiff along the banks to such an extent as to cause a total destruction of its value, and that the Government did not deny the ownership, but admitted that the work was done by authority of Congress, and simply denied that the work had produced the alleged injury and destruction, and it was held that the Circuit Court had power to inquire whether such overflow rendered the land absolutely worthless, and if so found, that in contemplation of law it had been taken and appropriated by the Government and compensation should be made therefor. This case was similar in its facts to that of *Pumpelly* v. *Green Bay & M. Canal Co.* (13 Wallace, 166), wherein it was held that the backing of water so as to overflow the lands of an individual, or any other superinduced addition of water, earth, sand, or other material, or artificial structure

placed on land for the public benefit, is such a taking as by the constitutional provision demands compensation.

In both of these cases there was a taking, or its equivalent—an absolute destruction, of the value of property belonging to the plaintiff, *and there was and could be no suggestion that the lands the value of which was thus destroyed were held subservient to any public use.*

In *Monongahela Navigation Co.* v. *United States* (148 U. S., 312, 341) the facts were that by permission of the State of Pennsylvania the navigation company had constructed a certain lock and dam, and under a permanent franchise granted by that State was collecting tolls for use of same. Subsequently the United States condemned this property for the purpose of improving the navigability of the river, and the question was whether or not the franchise for exacting tolls should be taken into consideration in estimating the damages, and this court held that it should. After much discussion the Government's theory and the response thereto were thus succinctly stated by the court:

> The theory of the Government seems to be that the right of the navigation company to have its property in the river, and the franchise given by the State to take tolls for the use thereof, are conditional only, and that whenever the Government, in the exercise of its supreme power, assumes control of the river, it destroys both the right of the company to have its property there and the franchise to take

> tolls. But this is a misconception. The franchise is a vested right. The State has power to grant it. It may retake it, as it may take other private property, for public uses, upon the payment of just compensation. A like, though a superior, power exists in the National Government. It may take it for public purposes, and take it even against the will of the State; but it can no more take the franchise which the State has given than it can any private property belonging to an individual.

A clear and radical distinction between that case and the present one is that no permanent franchise for the use of any portion of the waters of the St. Marys River has ever been granted to the Chandler-Dunbar Water Power Company. On the contrary, all uses of the water by the company have been made under licenses or permits which contained express provisions for revocation; and that company is vested with no more right to the use of the water than if the power plant and wing dam located by it in the stream had been constructed without any permission upon the part of the United States. In such case it would be in the same condition as was Atlee, in the case of *Atlee* v. *Packet Co.* (21 Wallace, 389, 394), wherein it appeared that Atlee had erected a pier in the navigable waters of the Mississippi River for his own use as a part of a boom for saw logs without any license from the Government. A barge belonging to the packet company was sunk from a collision with this pier. Atlee's

contention and the holding of this court was thus stated through Mr. Justice Miller:

> He rests his defense solely on the ground that at any place where a riparian owner can make such a structure useful to his personal pursuits or business, he can, without license or special authority, and by virtue of this ownership and of his own convenience, project a pier or roadway into the deep water of a navigable stream, *provided he does it with care and leaves a large and sufficient passway of the channel unobstructed.*
>
> *No case known to us has sustained this proposition, and we think its bare statement sufficient to show its unsoundness.*
>
> It is true that bridges, especially railroad bridges, exist across the Mississippi and other navigable streams which present more dangerous impediments to navigation than this pier of Mr. Atlee's, and that they have, so far as they have been subjected to judicial consideration, been upheld. But this has never been upon the ground of the absolute right of the owners of the land on which they abutted to build such structures. The builders have in every instance recognized the necessity of legislative permission by express statute of the State or of the United States before they ventured on such a proceeding.

It was therefore held that the pier was an unlawful structure and that Atlee was liable for the sinking of the barge.

The following cases show the limitations that must be placed upon the Monongahela case, and that it

rested exclusively upon an irrevocable franchise granted by the State, when it had jurisdiction thereover because Congress had not assumed control over the stream.

In *McKeen* v. *Delaware Division Canal Co.* (49 Penna. State, 425) it was held that where a deed conveyed to the purchasers of lots with water powers the right of drawing a specified quantity of water under a given head, expressly providing, however, that the grantee should not at any time interrupt or impair the navigation and not without guaranteeing when, where, how, or to what extent of fall the water should be used, the injury which followed the swelling of the water of the Lehigh by raising the dam at its mouth to improve the navigation of the Delaware Canal was consequential only and without remedy unless conceded by the State as an act of grace.

In *Fox* v. *Cincinnati* (104 U. S., 783) it was held that where by authority conferred by law the board of public works of the State leased the surplus water of her canals, but reserved the right to resume the use of it when it should be needed for the purposes of navigation, the lessee was not deprived of his property without due process of law by a statute whereby one of the canals within certain limits was granted to a city for a highway.

In *Chicago, B. & Q. Ry. Co.* v. *Illinois* (200 U. S., 561) the facts were, that the railroad company had constructed a bridge over a natural watercourse which crossed its right of way, and subsequently the drainage commissioners ordered the company to remove

the bridge and culvert then constructed, or construct one that would meet with certain requirements specified by them. It was insisted by the company that the bridge was lawfully constructed under its general corporate power, and as the depth and width of the channel under it were sufficient at the time to carry off the water of the creek as it then flowed, the foundation of the bridge could not be removed and its use of the bridge disturbed unless compensation be first made or secured to it, and that if it be required to meet such expenses out of its own funds it would in the meaning of the Constitution be a taking of its property for public use without compensation. Both the Supreme Court of Illinois and this court rejected this contention of the railroad company, holding that there was an implied duty on the part of the company to maintain an opening adequate and effectual for such an increase in the volume of water as might result from lawful and reasonable regulations established by appropriate public authority from time to time for the drainage of lands on either side of the watercourse.

The authority to require the removal of this bridge or the construction of a proper one was rested on the police power of the State, but a similar ruling was made by this court in *West Chicago Railroad* v. *Chicago* (201 U. S., 506, 524). In that case it appeared that the municipal authorities by ordinance had given permission to the street railroad company to construct a tunnel under the south branch of the Chicago River, which was a navigable stream, the

law of the State, however, providing that railways should not be constructed so as to interrupt the navigation of any water in the State. The increase in commerce having become such as to demand a deepening of the channel, the city passed an ordinance requiring the company at its own expense to either remove the tunnel or lower it to conform with the necessities of commerce. It was insisted by the company that such a requirement was a taking of its property, but the contention was rejected, this court in the course of its opinion saying:

> If, then, the right of the railroad company to have and maintain a tunnel under the Chicago River is subject to the paramount public right of navigation; if its right to maintain a tunnel in the river is a qualified one, because subject to the specific condition in the act of 1874 that no tunnel should interrupt navigation; if the present tunnel is an obstruction to navigation, as upon this record we must take it to be; and if the city, as representing the State and public, may rightfully insist that such obstruction shall not longer remain in the way of free navigation, it necessarily follows that the railway company is under a duty to comply with the demand made upon it to remove at its own expense the obstruction which itself has created and maintains. If the obstruction can not be removed except by lowering the tunnel to the required depth and (if a tunnel is to be maintained) providing one that will not interrupt navigation, then the cost attendant upon such work

must be met by the company. The city asks nothing more than that the railroad company shall do what is necessary to free navigation from an obstruction for which it is responsible, and (if it intends not to abandon its right to maintain a tunnel at or near Van Buren Street) that it shall itself provide a new tunnel with the necessary depth of water above it.

If the city of Chicago could order the destruction of a tunnel under a navigable stream, constructed under a revocable permit, and not compensate for same, it is apparent that if the franchise involved in the Monongahela Navigation case had been revocable no damage could have been allowed for its destruction.

The following cases illustrate under what circumstances an interference with a riparian owner's use of a stream, or the requirement that certain things be done in order to improve navigation, is not a taking of property within the constitutional sense:

Transportation Co. v. *Chicago* (99 U. S., 635) was an action to recover damages for injuries alleged to have been sustained by the plaintiffs in consequence of the action of the city authorities in constructing a tunnel along the line of La Salle Street and under the Chicago River. They were the owners of a lot bounded on the east by the street and on the south by the river, and the injury of which they complained consisted of their being deprived of access to their premises, both on the side of the river and on that of the street, during the prosecution of the

work. This court held that their injuries were incidental, and that they had not been deprived of any property contrary to the Constitution.

Scranton v. *Wheeler* (179 U. S., 141, 163, 164) was an action by an owner of land fronting upon a navigable river seeking to recover damages arising from the permanent obstruction of his access to the river by a pier erected in the river under the authority of Congress for the purpose of improving navigation. This court held that he was not entitled to recover, because the impairment of his access to the river was not a taking of his property, and, among other things, said:

> Is the broad power with which Congress is invested burdened with the condition that a riparian owner whose land borders upon a navigable water of the United States shall be compensated for his right of access to navigability whenever such right ceases to be of value solely in consequence of the improvement of navigation by means of piers resting upon submerged lands away from the shore line? We think not.
>
> * * * * *
>
> If the riparian owner can not enjoy access to navigability because of the improvement of navigation by the construction away from the shore line of works in a public navigable river or water, and if such right of access ceases alone for that reason to be of value, there is not, within the meaning of the Constitution, a *taking* of *private* property for public use, but only a consequential injury to a right which

> must be enjoyed, as was said in the Yates case, "in due subjection to the rights of the public"—an injury resulting incidentally from the exercise of a governmental power for the benefit of the general public, and from which no duty arises to make or secure compensation to the riparian owner. *The riparian owner acquired the right of access to navigability subject to the contingency that such right might become valueless in consequence of the erection under competent authority of structures on the submerged lands in front of his property for the purpose of improving navigation.*

In *Gibson* v. *United States* (166 U. S., 269, 275) the facts were that the claimant was the owner of a very valuable tract of land in a high state of cultivation, which had a frontage of 1,000 feet on the main channel of the Ohio River. Under an act of Congress, for the purpose of improving navigation, a dike was constructed along this front, which substantially destroyed the claimant's landing by preventing free egress and ingress from and to the landing in front of her farm to the navigable channel of the river, the land being thus reduced in price from $600 to from $150 to $200 per acre. This court denied a right of recovery, holding that:

> The fifth amendment to the Constitution of the United States provides that private property shall not "be taken for public use without just compensation." Here, however, the damage of which Mrs. Gibson complained was not the result of the taking of any part of her

property, whether upland or submerged, or a direct invasion thereof, but the incidental consequence of the lawful and proper exercise of a governmental power.

In *Union Bridge Co.* v. *United States* (204 U. S., 364) this court, speaking through Mr. Justice Harlan, reviewed the many cases upon this subject. That case involved the validity of an order of the Secretary of War requiring the bridge company to make certain changes or alterations of its bridge in order that navigation might be rendered reasonably unobstructed. The bridge had been erected by authority of a State charter and was not at that time an obstruction to commerce; but it was held that the owners had knowledge of the paramount authority of Congress over navigation, and its maintenance was subject to such power, and that the hitherto silence or inaction of Congress in relation thereto vested the company with no rights, and that the requirement that the bridge be materially altered or removed was not taking its property in violation of the Constitution.

United States v. *Rio Grande Irrigation Company* (174 U. S., 690, 707) may be regarded as an extreme case. It was held there that under an act of Congress prohibiting the creation of any obstruction not affirmatively authorized by law to the navigable capacity of any waters in respect to which the United States had jurisdiction, the withdrawal of water for irrigation purposes from a stream far above the extreme point of navigability could be enjoined. Hence

this company was denied the right of making use of water from a stream which was not at that point navigable solely because the withdrawal of the water would interfere with its navigability many miles below; and the value of the company's plant was in all probability thereby entirely destroyed.

In Nichols, the Power of Eminent Domain, sections 156 and 157, it is said:

> SEC. 156. *Right of access to the channel only.*—The right of access to public waters, when recognized by the local law, is limited to access to the channel opposite the upland. It seems to be generally conceded that if the legislature authorizes the construction of a dam or of a bridge with or without a draw across a stream upper riparian proprietors who are cut off from navigation to and from the outside world have no redress. The distinction may, perhaps, be said to rest on the difference between general and special damage, though it can be put simply on the ground that the right of access does not extend beyond the channel in front of the land.
>
> SEC. 157. *Riparian owner's other rights.*—There are many other advantages that a riparian owner upon public waters possesses besides that of access. The disposal of sewage, *the use of the waters for mechanical purposes*, prospect, light, and air are among them. It is conceivable that all these advantages might be held legal rights within the meaning of the decision in *Lyon* v. *Fishmongers' Company. But it has never been held that any of them are superior to the public rights in public waters.*

What distinction can there be in principle between the facts involved in the above-cited cases, in which it was held that private property was not taken in the constitutional sense, and those here presented? In *Chicago, Burlington & Quincy Railway Company* v. *Illinois* and *West Chicago Railway Company* v. *Chicago* the companies were required to either abandon entirely, in one instance a bridge, and in the other a tunnel, or alter their condition at great expense. The rights of these parties to use, one the bridge and the other the tunnel, were certainly as tangible as the right of the Chandler-Dunbar Company to use the water of St. Marys River for power purposes. Both of those companies had charters vesting them with ample power to make and use the bridge and tunnel, and those structures were originally lawful; but it was held that they were made and used subject to the rights of the public, and hence that no compensation could be exacted when the authorities representing the public required their alteration or destruction.

Scranton v. *Wheeler* and *Gibson* v. *United States* are more similar to the present case in their facts if not in principle. The owners of the lands in those cases certainly had as much right of access to and use of the waters upon which they lay as the Chandler-Dunbar Company had to the waters of the St. Marys River. The right of Mrs. Gibson to have easy access to the Ohio River and to float the products of her farm to the market was as substantial as the right of the Chandler-Dunbar Company to use the waters of the

St. Marys as a power to create electricity. And it would certainly seem indisputable that the right of the Rio Grande Irrigation Company to use the waters of the Rio Grande River for irrigation purposes far above its extreme point of navigability was as substantial as the water right of the Chandler-Dunbar Company. Yet the rights of all these parties were held to be subservient to that of the public to have those streams preserved or improved for the purposes of navigation.

IV.

The court erred in adopting the method which it did in fixing the value of the water power.

The court fixed the value of the water power by estimating the number of cubic second-feet which he found could be considered as a surplus of the flow of water, and determining how much power such flow could generate and the value of each thousand horsepower. He thus found that the annual income from the 6,500 horsepower derived from the surplus water would be $55,000, and that its present total value was $550,000. The particular property the value of which the court was here endeavoring to fix was the right of the Chandler-Dunbar Company to the use of the power in the stream of water, and there is no reason why this property should not be valued in the same way as any other piece of property taken for public use. As to what compensation shall be paid for property so taken there is no conflict among the authorities. In 2 Lewis (2d ed.),

Eminent Domain, section 463, with reference to the measure of damages when an entire property is taken, it is said:

> This case presents but little difficulty, and, so far as we have observed, there is no difference in the authorities as to the proper measure of damages. *A fair equivalent for any entire piece of property is its market value in money.*

And again, in section 478 it is said:

> In estimating the value of property taken for public use it is the market value of the property which is to be considered. The market value of property is the price which it will bring when it is offered for sale by one who desires but is not obliged to sell it, and is bought by one who is under no necessity of having it.

While there is some conflict in the authorities as to what particular evidence may be considered in determining what the cash value of property is, yet it is well recognized that facts merely speculative should not be considered. The conclusions reached by many courts are embraced in the following quotation from 2 Lewis, Eminent Domain, section 480:

> Proof must be limited to showing the present condition of the property and the uses to which it is naturally adapted. It is not competent for the owner to show to what use he intended to put the property, nor the probable future use of the property. If, for instance, the property has a water power on it, this fact may be shown, but it would be incom-

petent to go on and show what mills might be constructed and furnished with power therefrom and what profits could be made from the operation of such mills. So it may be shown that land is suitable for raising cranberries, but it is not competent to go into the price of cranberries, the quantity which might be raised, and the like. It has been held that it was incompetent to show the probable rental value of a lot with a suitable building on it, or the cost of improving property in a certain way and its value as so improved, but in another case the owner was allowed to exhibit a plan of proposed improvements on the property in question for the purpose merely of showing the capabilities of the property. It is proper to show the business actually carried on upon the property, but not to go into the profits of such business. In a case in Wisconsin it was held proper to show that property was suitable for division into village lots and the probable value of such lots. But this is clearly going one step too far. The probable value of village lots which do not exist is too speculative. In a condemnation of shore property nothing should be allowed for the possibility that the legislature may grant rights to shore owners below high tide. And generally remote and speculative inquiries should be excluded.

In a proceeding to condemn the right of way for a railroad through a ravine it appeared that this ravine was the only available outlet for certain coal lands belonging to the defendants and others and that the defendants had a pri-

vate railroad through the ravine over which they transported coal for themselves and others. It was held that evidence as to the probable extent of coal in the lands which had their outlet through this ravine and the probable rents which would be paid defendants for transportation was incompetent, as these matters were too speculative and contingent. The coal might not be mined, or it might find other outlets. Part of a tract of land, mostly under water, was taken for railway purposes; $4,000 damages were awarded, based upon the theory that the railroad would prevent building a canal or slip the length of the tract, whereby the same might be filled up and made available. But the slip could not be built unless the South Menominee Canal was extended, which depended upon the action of third parties and the public. The damages were held to be too remote and speculative.

This authority and the many cases there cited and numerous other cases show that while it was probably proper for the court to consider the amount of electric energy that may be produced by a certain amount of water and the probable value of such electricity, yet he should not have adopted the result of his calculations as the valuation. The question for the court to determine was, How much was that right of user in the water worth; how much cash could be obtained by the Chandler-Dunbar Company for it? It can not be conceived that anyone who might desire to purchase this property would figure out how much he could probably receive per annum for

the electricity produced by the water power and give to the company therefor the present worth of an annual income of that amount. So many contingencies exist that he would certainly deduct a very large proportion from the amount reached by such computation.

V.

The contention of the Chandler-Dunbar Company that it is entitled to compensation for a right of using one-half of the entire flow of the St. Marys River, less 10,000 cubic second-feet, the amount estimated to be necessary for navigation, can not be sustained, because its right to use any amount beyond the 6,500 horsepower allowed by the court is too precarious, and the damages which would arise for being deprived of such possible use are too remote and speculative to justify any estimate to be placed thereon.

The following findings of fact by the court below, in addition to those heretofore quoted, have a material bearing upon this proposition:

> XXX. The plan for improvement proposed by the Chandler-Dunbar Water Power Company, and the only practicable plan which the record indicates, is the building of a dam at approximately right angles with the stream along the lower boundary of the Chandler-Dunbar submerged lands out to the thread of the stream, and then the extension of this dam as a wing dam or dike upstream along the international boundary line. Theoretically, this would impound upon the American side of the dike and pass over the dam the same water which would naturally flow over the same submerged land. (R. p., 86.)

XXXI. Obviously the erection of such a structure would practically affect the amount of water flowing on the Canadian side of the dividing wall. If, according to one suggestion, the crest of the natural-rock dam at the head of the rapids on the American side of this dike should be scalped down a few feet in order to avoid friction and get better conditions on the wheels, the tendency would be to divert water from the Canadian to the American side.

So, without such scalping, unless the wheels were so regulated as always to carry away exactly the proper amount, the tendency would be either to pull water into the American channel or to retard the flow on that side and flow the other side. These probable and possible effects might or might not be equalized by the erection of compensating works in the rapids or by using the Michigan-Lake Superior power canal for compensating purposes; but these things would be beyond the control of the Chandler-Dunbar Company. (R., p. 86, 87.)

XXXII. The converse situation from that suggested in the preceding paragraph may exist. So far as we are informed by this record, the Canadian Government, as sovereign or as a proprietor, might see fit to remove the crest of the rock dam on its side of the dividing wall or widen and deepen the existing Canadian power canal, and thereby divert to the Canadian side a great part or even all of the water, leaving the Chandler-Dunbar submerged land no longer submerged. (R., p. 87.)

XXXIII. The proposed structure, especially in connection with the proposed manufacturing plant built upon piers and covering a great part or all of the submerged land, would be an obstruction to the ice which comes down in the spring in enormous quantities and would tend to cause an ice jam or blockade, which might send the river over its banks, both in the United States and Canada, and might, for example, destroy the locks. (R., p. 87.)

LXIII. If controlling works were constructed across the channel and were so used as to equalize, as far as possible, the outflow of Lake Superior, they would increase the amount of flow in the low-water period, and so increase the amount of power then to be derived therefrom; but they would decrease the amount of flow at the high-water period and diminish the amount of power which could then be produced. If such works were used to maintain the level of Lake Superior as perfectly as possible, they would tend to diminish the power to be derived at low-water periods. (R., p. 96.)

These findings of fact, and those heretofore quoted, show that the future use of this water power by the Chandler-Dunbar Company is altogether problematical and highly speculative. While the court substantially finds that there is a reasonable prospect of its being used by a paper mill, yet how long such user might last, and whether or not Congress might make some agreement with Canada for the erection of dams or compensating works, or that some other

system might be adopted whereby this entire power would be destroyed even before a paper-mill plant could be constructed, is altogether uncertain. Hence, any value attached to this property is entirely speculative.

In their brief counsel draw a parallel between the control over this stream by the United States and the rights of the riparian owners, and the dominant and servient estates in a property held subject to an ordinary easement. But the principles are entirely different. The respective rights held by the owners of the dominant and servient estates are clearly fixed, and the right of neither can be impaired by the other. Here the use of this stream is subject to the absolute control of Congress. It might, if it saw fit, permit it to be used by the riparian owners for many years, while, on the contrary, it might at any time order that every obstruction be removed therefrom and deny its use for any other purpose than for the purposes of navigation.

VI.

The contention of the Chandler-Dunbar Company that it is entitled to recover, first, for the value of all waters which it is contemplated shall flow through the channel of the Michigan-Lake Superior power canal, or, second, of such waters as it is contemplated shall be used under lease from the United States, can not be sustained, because the use of the surplus waters for the creation of power is merely an incident to the main use of the same for purposes of navigation.

The case of *Kaukauna Co.* v. *Green Bay, etc., Canal* (142 U. S., 254, 272) is a conclusive answer to the company's contention. That case involved facts which, upon this question, were very similar to the facts in the present case. Upon this subject the court said:

> The case of the plaintiff canal company depends primarily, as stated above, upon the legality of the legislative act of 1848, whereby the State assumed to reserve to itself any water power which should be created by the erection of the dam across the river at this point. No question is made of the power of the State to construct or authorize the construction of this improvement, and to devote to it the proceeds of the land grant of the United States. The improvement of the navigation of a river is a public purpose, and the sequestration or appropriation of land or other property, therefore, for such purpose, is doubtless a proper exercise of the authority of the State under its power of eminent domain. Upon the other hand, it is probably

true that it is beyond the competency of the State to appropriate to itself the property of individuals for the sole purpose of creating a water power to be leased for manufacturing purposes. This would be a case of taking the property of one man for the benefit of another, which is not a constitutional exercise of the right of eminent domain. *But if, in the erection of a public dam for a recognized public purpose, there is necessarily produced a surplus of water, which may properly be used for manufacturing purposes, there is no sound reason why the State may not retain to itself the power of controlling or disposing of such water as an incident of its right to make such improvement. Indeed, it might become very necessary to retain the disposition of it in its own hands, in order to preserve at all times a sufficient supply for the purposes of navigation.* If the riparian owners were allowed to tap the pond at different places, and draw off the water for their own use, serious consequences might arise, not only in connection with the public demand for the purposes of navigation, but between the riparian owners themselves as to the proper proportion each was entitled to draw—controversies which could only be avoided by the State reserving to itself the immediate supervision of the entire supply. As there is no need of the surplus running to waste, there was nothing objectionable in permitting the State to let out the use of it to private parties, and thus reimburse itself for the expenses of the improvement.

Therefore the fact that water is to be utilized under lease from the United States can not change in the least the rights of the Chandler-Dunbar Company. Whatever rights it had in these waters were entirely subservient to the right of Congress to declare their extinguishment necessary for the proper navigation of the stream, and its rights and the measurement of damages for the taking of its property which adjoined the stream are precisely the same whether the United States permits all the water to run to waste or sees proper to utilize a part thereof.

VII.

The court did not err in deducting seven percent from value of lands belonging to Chandler-Dunbar Company on ground that said company did not own Portage Street.

The court below held that Portage Street north of the ship canal had never passed from the United States, and that the award of compensation otherwise to be made to the Chandler-Dunbar Company on account of its upland along the rapids should be diminished by seven per cent on account of its lack of title to the Portage Street subparcel thereof. (Rec., 423, sec. 19.)

A witness, John G. Stradley, who lived in Sault Ste. Marie for 25 years, testified (Rec., 185–186) that he was an abstractor of titles and one time mayor of the city, and that at no time while he had resided there was any claim made by the city of Sault Ste. Marie to Portage Street north of the canal, nor had

the city made any use of it or any improvements thereon of any kind, but that the said alleged street is full of holes and rubbish.

The Chandler-Dunbar Company can not claim title as against the United States by adverse possession. (*Stanley* v. *Schwalby*, 147 U. S., 508, and *United States* v. *Verdier*, 146 U. S., 219.)

If said street was not accepted by said city, improved and used, it did not become a street and the land not being a street or a public road remained vested in the United States and could not revert to an adjoining landowner. Its function of a street has never been performed to be abandoned to revert but remained in the Government awaiting an acceptance of the offer much beyond a reasonable time for such acceptance.

We insist that the dedication of Portage Street never having been accepted by the village or city of Sault Ste. Marie that the title of such reposes in the Federal Government. Even had the village or city accepted it it would have made no difference. the same being dedicated to the public, the public held it in trust for the uses of a street and for no other purpose. We call attention upon this proposition to *Simplot* v. *Chicago, M. & St. P. Railway Co.* (16 Fed. Rep., 350.)

In this case it was held that the dedication to the public of a street by the Government created a trust; that the city or State took the street in trust for the uses of public travel and that neither the city nor the

State could discharge the premises of the trust. It was held in this case that inasmuch as the city could not by conveyance discharge itself of the property of the trust that the State could not through its statute of limitations discharge itself or the property of the trust. That therefore the statute of limitations did not run and that the title was one in trust for the uses and benefits of the people and not such a title as could be acquired by private ownership. This case is followed by the case of *Bennett* v. *Chicago, Minneapolis & St. Paul Railway Company* (73 Fed. Rep., 696).

In this case it was held that the abutting owners on a street laid out and dedicated by the United States Government had no rights in the street as against a railroad company which was occupying the street, and therefore couldn't claim damages; that the title acquired by the city or the State was that of a trustee and that the property could only be used by public travel; that the railroad company was conducting one of the modes of travel; and that the abutting owners on the street took the title to their lands subject to the public rights; and the Simplot case, last cited, was followed as authority. (*People* v. *Williams*, 64 Calif., 498.)

In this case the State by certain legislation had surrendered to the city and county of San Francisco certain rights in certain streets which were under water in that city. There was no action by the city or county accepting the act; and it was held that the act was an offer to dedicate and that not having been

accepted title had not passed, and it was said by the court (502):

> Conceding that the State had the right to dedicate to the city a portion of the navigable waters of the harbor for the purpose of deepening, improving, and preserving the same, and for the regulation of vessels and wharves therein, and to surrender its rights to control and regulate them, the statute relied on did not, *per se*, operate as a dedication or a surrender. It contained a mere offer to dedicate a portion of Channel Street and a portion of Mission Creek as an open canal, if the city would deepen and improve it as the legislature prescribed. But it was for the city to accept the offer and complete the improvements. If it did not, the dedication was not complete. The passage of an ordinance setting apart and dedicating a portion of the water front in a harbor for public use as a free public dock for ships is, said the late Supreme Court, a mere offer to dedicate, and the dedication is not complete, nor does the public acquire any right to the easement until it has been accepted and used by the public in the manner intended.

So we insist that the Government still holds the title to Portage Street, and inasmuch as Portage Street is on a bayou the line must be projected over the entrance of this bayou and Portage Street given its riparian rights out into the stream. As the methods to be used in running these lines and as to the adoption of the Massachusetts rule in this State, we cite *Lumber Co.* v. *Peters* (87 Mich., 498).

It is, therefore, insisted that the judgment of the court below should be modified to conform to the contentions set forth in this brief and in the original brief filed by the United States.

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SUPREME COURT OF THE UNITED STATES

OCTOBER TERM, 1912

THE UNITED STATES,
PLAINTIFF IN ERROR

vs. No. 783

THE CHANDLER-DUNBAR WATER POWER COMPANY, ET AL

THE CHANDLER-DUNBAR WATER POWER COMPANY,
PLAINTIFF IN ERROR

vs. No. 784

THE UNITED STATES

BRIEF OF CHANDLER-DUNBAR WATER POWER COMPANY

We write for cubic feet per second, "c. s. f."; for Michigan-Lake Superior Power Company, "M. L. S. P. Co.", and for Chandler-Dunbar Water Power Company, "C. D. Co."

BRIEF STATEMENT.

Error to review determination of just compensation for riparian lands, subaqueous lands and water power of the C. D.

Co. at Sault Ste. Marie, taken by the United States under section 11 of act approved March 3, 1909, providing for the taking

> "of all lands and property of every kind and description north of the present St. Mary's Falls Ship Canal throughout its entire length and lying between said ship canal and the International Boundary Line at Sault Ste. Marie in the State of Michigan"

on account that the same

> "is necessary for the purposes of navigation of said waters and the waters connected therewith." (35 Stat. 820.)

The Secretary of War took possession of the property on January 1st, 1910, filed notice of the taking, and these proceedings were instituted to determine just compensation.

The proceedings in condemnation, commenced April 25th, 1910, were had before Hon. Arthur C. Denison, then District Judge for the Western District of Michigan, Northern Division. Trial proceeded before the Judge, a jury having been waived by all parties. Issue was made up by petition on the part of the United States, and the answer of the Chandler-Dunbar Water Power Company thereto.

The Judge filed his opinion, and his findings of fact and conclusions of law, to certain of which findings and conclusions this respondent filed its exceptions. Respondent requested the finding of certain other facts, and adoption of certain other conclusions of law, the finding and adoption of which were refused, and this respondent excepted to such refusal. The Court entered its judgment awarding to this respondent damages for the taking of its property, parcel of the property taken, in the sum of $652,312, this sum being made up as follows:

For the raw water power	$550,000
For the existing dike	16,524
For the upland, excepting claims 95 and 96 ($65,000 less seven per cent on account Portage Street sub-parcel	60,450
Claims 95 and 96	25,000
Half interest in sub-parcel on bridge property	338
(R. 317.)	$652,312"

At time of the taking there existed a water power canal of the M. L. S. P. Co., reaching from the river above to the river below the intake and outlet of the United States navigation canal known as the St. Mary's Falls canal. This power canal was planned to carry the half of the flow of the river, and was of capacity to carry, with due regard to economy, at least 20,000 c. s. f. Some corporation allied with the M. L. S. P. Co. had, by authority of the government of Ontario, built controlling works from the Canadian shore to the International Boundary, at or above the head of the rapids. The fall in the rapids was about 18 feet, about 10 feet of which was on the C. D. Co. land and about 8 feet on the lands of the United States below on the stream.

> "It is the plan and expectation of the present officials of the War Department and the present engineering officers in charge of these works to permit 10,000 c. s. f. or more of water to pass through this power canal under average conditions, and to receive payment therefor by way of a license or rental as contemplated by the Act of March, 1909, with reference to surplus water." (Find. XXXV. R. 336).

In 1900 there lay between the St. Mary's Falls canal at Sault Ste. Marie and the International Boundary a strip of upland of width varying from 150 to 250 feet and about 3,000 feet long. Also two small low islands over against the same, comprising about $2\,^1/_5$ acres. Also a strip of subaqueous land between this strip of upland and said Boundary of width of about 2,000 feet. Over this subaqueous land there ran about 65 per cent of the volume of St. Mary's River. The volume of the flow of the river is found to be, for the purposes of this case, 64,000 c. s. f., though for the twenty-five year period ending in 1909, the average flow was 75,000 c. s. f. (R. 327.)

Nearly all of this strip of land and the islands and the subaqueous land were claimed by the C. D. Co. under patent from the United States, dated in 1883.

In 1903, the United States challenged the claim of title of the C. D. Co. to the islands and filed bill in equity to quiet title thereto and in such bill challenged the patent to the shore land. This contention resulted in dismissal of the bill upon the merits. (U. S. vs. C. D. Co., 152 Fed. 25. Same case, see 209 U. S. 447.)

In 1908 the United States, wishing to use a part of this upland for an enlargement of the canal and a new lock, the C. D. Co. conveyed to it a strip thereof adjoining the canal about 100 feet wide and about 3,000 feet long for the expressed consideration of one dollar, on the understanding that the C. D. Co. was to have a conduit through which to lay wires to transmit power by electricity from its power plant in the river across the navigation canal to the inhabited part of the city of Sault Ste. Marie, and a grade for side-track to its remaining land and its power plant. Provision was made for this conduit, and a part of the grade was formed by the United States. (Find. XXIX., R. 333.)

Later, and on the 3rd of March, 1909, Congress enacted the law for taking.

The report of the Committee on Rivers and Harbors, which recommended the passage of this act, was in part as follows:

> "Sections 11 and 12 provide for the acquisition of all private property in the St. Mary's River, Michigan, between the present public works and the International Boundary Line. After full discussion and examination, it is the opinion of the Committee that the acquisition of all private rights in this stream are essential in order that the United States may be in a position to utilize this stream for the purposes of navigation * * *. As there is a water power in this stream, a part belonging to the United States and part to be acquired by the condemnation of private rights in question, the section provides that this water power may be conserved by the Government and used directly for its own purposes or leased by the Secretary of War."

The C. D. Co. had for some time maintained a water power, created by a cross-dam running north from a point near the foot of its land about 400 feet into the stream, and a wing dam running up and out into the stream from the north end of this cross-dam, and an excavated tail-race running down across its land below its cross-dam and also across land of the United States below. The available head of this power plant was 15 feet, 9 feet of which was due to the fall on the C. D. Co.'s land, and 6 feet of which was due to the tail-race excavation on the lands of the United States below. The scope of the plan of this improvement was to take and use 6,500 c. s. f. But as built, the work could not take and use more than about 2,000 c. s. f.

This is about the amount which the C. D. Co. has used. To take the full amount included in the scope of the work, required excavation of the forebay. A license for the maintenance of this work, revocable in terms at the pleasure of the Secretary of War, had been issued to the C. D. Co.

Respecting this license, the act for taking provided that same

> "shall cease and determine and become null and void on January 1st, 1911." (35 Stat. 821.)

The C. D. Co. had formulated plans to take and use the entire flow of the river appurtenant to this land, less the amount required for navigation. It had applied to the Secretary of War for approval thereof. But it had not entered upon execution thereof. (R. 208, 211.)

At the time of the trial, the United States was constructing a water power plant of larger capacity than the water power plant of the C. D. Co. The plan of this plant consisted of a continuation—extension—of the cross-dam, which was of the C. D. Co., about 200 feet further north into the stream, and a wing wall or dike extending up and out into the stream from the north end of the extended cross-dam, reaching, at up stream end, about 1,000 feet into the stream. The scope of this plan was to impound for power 7,500 c. s. f., and to use same on an available head of 15 feet, of which 9 feet was due to the fall on the C. D. Co. land.

The Court found a perfect unencumbered raw water power to be of the annual rental value

> "per theoretical horse power as follows: for the first 3,000 h. p., $10 each; for the second 3,000 h. p., $7.50 each; for all beyond 6,000 h. p., $5 each. The cost of development so far made should be added."

Also that the actual head on the C. D. Co. land was about 10 feet, affording an available head of 9 feet; and that one c. s. f. on an available head of 9 feet was sufficient to produce one horse power. That the C. D. Co. was entitled for the taking of its water power to an award based on the taking of the 6,500 horse power, which was within the scope of the plan of the plant maintained by it at the time of the taking. The Court thereupon made a specific award to the C. D. Co. of $550,000 on account of the taking of all its water power. This award was based on the taking of the 6,500 c. s. f. embraced within the scope of the then present development of the C. D. Co.,

and rejecting (a) the amount of water which the United States planned to take into its hydraulic plant then under construction, and (b) the amount which the United States intended to lease, to be taken through the M. L. S. P. Co. canal and (c) the remainder of the flow claimed by the C. D. Co. to be in excess of needs for navigation.

The award to the C. D. Co. was for 6,500 horse power of annual rental value as follows:

For first 3,000 h. p. at $10 per h. p.	$30,000
Second 3,000 h. p. at $7.50 per h. p.	22,500
500 h. p. at $5.00 per h. p.	2,500
Total rental value	$55,000

Annual rental of $55,000, capitalized at 10 per cent, $550,000.

Portage Street.

Pursuant to section 7 of act approved September 26, 1850 (9 Stat. 469), one Whelpley surveyed the Village of Sault Ste. Marie. In making such survey, he laid out that part of Portage Street north of canal. (See map, R. 6a.) Survey approved September 4, 1855. The plat shows Village Lot 3 abutting on Portage Street on the south side. Patent of Lot 3, issued in 1879, reads:

> "According to the official plat of the survey of said land returned by the Surveyor General." (Rec. p. 184.)

The field notes of the Whelpley official survey give for one boundary of Village lot 3:

> "Thence north 77 degrees 10 minutes west along the south side of Portage Street to the right bank of the River St. Mary." (Rec. p. 181.)

Patent for Indian Reserve issued in 1883 to Wm. Chandler, grantor of C. D. W. P. Co., describes the patented land as bounded

> "on the south by Portage Street and particularly by a line which was in fact the northeast line of Portage Street." (Rec. p. 92.)

The Chandler Dunbar Water Power Co. was at the time of taking the owner of the Indian reserve and of the undivided half of Lot 3 abutting on and bounded by the so-called Portage Street. (R. p. 80.)

The City of Sault Ste. Marie came into existence as a city in 1888.

The Court granted the 35th request of petitioner, holding that title to Portage Street so-called never passed from the Government and was in the Government at the date of taking.

This ruling was excepted to by the Chandler-Dunbar Water Power Company on account that such was not the law (Rec. p. 301.)

To the finding that the award of compensation otherwise to be made to the Chandler-Dunbar Water Power Co. on account of its uplands along the rapids should be diminished by seven per cent on account of its lack of title to the Portage Street sub-parcel contained thereon, said Company excepted because such was not the law. (Rec. p. 316.) (Conclusion L.)

The granting of said 35th request of petitioner and the exception thereto and the above mentioned conclusion L, and the exception thereto raise the question whether just compensation was not denied to the Chandler-Dunbar Water Power Co. for the taking of the so-called Portage Street parcel and the compensation to it unjustly reduced. (Assignment of Error No. 1. R. p. 523.)

The Court fixed the value of the Portage Street parcel at $4,550.00 in case the City should be found to have title. (Rec. p. 116.)

The ownership of the Indian Reserve and of an undivided half of Village lot 3 abutting properties on Portage Street parcel is the basis of the claim of the Chandler-Dunbar Water Power Co. for three-fourths of said $4,550.00, or $3,412.50.

The contentions of the plaintiff in error further appear in the following

Specification of Errors.

First. Holding that the title to Portage Street, so-called, north of the ship canal, had never passed from the United States, and holding that the award of compensation otherwise to be made to the Chandler-Dunbar Company on account of its uplands along the rapids should be diminished by seven per cent on account of its lack of title to the Portage Street sub-parcel thereof.

The said seven per cent was $4,550.00, (Rec. p. 317) and three-fourths thereof, viz: $3,412.50, is claimed by reason of

three-fourths ownership of said Portage Street sub-parcel by the C. D. Co.

The error arose in approving the 35th request of petitioner (Rec. p. 300) and conclusion of law L. (Rec. p. 316) and the exceptions thereto.

Second. Holding C.-D. Co. not entitled to the value of the power available by the use of the half of the volume of flow of the river appurtenant to the American shore, less the amount, parcel thereof, to be required for navigation. Reduction of award on account thereof, $2,968,181.

This error arose directly through adoption of conclusion of law XXVI (R. 313), and disapproval of C.-D. Co.'s requests for conclsuion of law No. 3 (R. 303), No. 5 (R. 304), and C.-D. Co.'s request for fact No. 8 (R. 350-1).

Third. Holding C.-D. Co. not entitled to the value of the power available by the use of the volume of the flow which the United States has planned to divert, or permit to be diverted, for use for power into and through the power canal of the M. L. S. P. Co. Reduction of award on account thereof, $2,045,454, parcel of amount of $2,968,181 specified in second assignment of error.

This error arose directly through adoption of finding XXIX (R. 338), conclusion XXIX (R. 314), refusal of C.-D. Co.'s request for facts III, IV, VII, VIII (R. 350-1), and disapproval of C.-D. Co.'s requests for law VIII (R. 304), X (R. 305), and XXV (R. 308).

Fourth. Holding C.-D. Co. not entitled to the value of the power available by the use of the volume of flow which the United States has planned to divert into, and use through, its works being constructed at the time of the trial in the bed of the river on the site of the C.-D. Co. development. Reduction of award on account thereof, $650,000, parcel of amount of $2,968,181 specified in second assignment of error.

This error arose directly through adoption of finding XXX (R. 314), and disapproval of C.-D. Co.'s request for law IX (R. 305) and XXIV (R. 308).

SPECIFICATION OF ERRORS

Fifth. In holding that the "proper basis for capitalization is ten per cent" instead of five per cent as claimed by respondent. Reduction of award on account of this error, $550,000.

This error arose directly through adoption of findings XV (R. 329) and LII (R. 339), and conclusion XIII (R. 311).

Sixth. Holding that the act of Congress of March 3, 1909, and its legislative history do not evidence an intent to recognize the existence of, and to pay for, all the water power rights appurtenant to the lands described in the act.

This error arose directly through adoption of conclusions IV (R. 310) and XII (R. 311), and disapproval of C.-D. Co.'s request for law I (R. 303).

Seventh. The findings of fact do not support the judgment.

This error arose on the case generally and especially on the disapproval of request of C.-D. Co. for conclusion of law No. III (R. 303), and No. V (R. 304).

ARGUMENT.

I.

INTENT OF CONGRESS.

Sixth Assignment of Error.

It is our contention that there is an intent shown in the Act of March 3rd, 1909, to pay for all the water power rights appurtenant to the lands of the Chandler-Dunbar Water Power Co.

This intent appears in the language of the Act. The Statute of March 3, 1909, gave the Circuit Court jurisdiction "to hear condemnation proceedings and to determine what compensation shall be awarded for the property taken under authority of this section."

There can be no doubt as to the property taken under authority of the statute.

The final award shows what property was condemned to public use, viz., all of the lands and property of every kind and description north of the St. Mary's Falls Ship Canal in fee simple absolute. (Rec. p. 156.)

Water Power of the Chandler-Dunbar Water Power Co., which was property, was thus included in the Condemnation.

Having thus shown that the water power of the Chandler-Dunbar Water Power Company was, in the constitutional sense of the word "taken" in 1909, there remained for the Court in 1911 to determine "what compensation shall be awarded for the property taken under authority of this section."

The Court said:

> "This action is to fix 'just compensation' to be paid to the property owners for the property so taken." (Rec. 81.)

It will appear in this brief that the Court did not award compensation for all the water power of the Chandler-Dunbar Water Power Co. It may be suggested that Congress was not required to take condemnation proceedings to obtain 4,000 cubic second feet of water, not at present, but which might sometime be needed for the operation of the locks.

This amount of water was but a fraction of the entire flow appurtenant to the lands of respondent, which excess of wa-

ter, after the condemnation, was to be leased by the United States for power purposes.

Congress having determined to take the water power in question, the principal part of which was to be leased, could easily find a reason for providing for compensation for what was taken, without mentioning any claimed easement.

Congress had good reason to be fair and reasonable to the respondent, Chandler-Dunbar Water Power Company. The title to the land of respondent was in litigation for several years.

U. S. v. Chandler-Dunbar Water Power Co., 209 U. S. 447 (Apr. 20, 1908) 152 Fed. Rep. 25 (Feb. 11, 1907).

The record in this Court of said case, p. 69, shows the bill of complaint of the United States was by the Circuit Court dismissed on July 25th, 1905.

The River and Harbor Act of March 3, 1905, authorized the widening of the upper entrance to the canal.

It was very desirable at once to obtain the land for the widening, but the title of the Chandler-Dunbar Water Power Company was then disputed by the United States in the cause above mentioned. In any case, condemnation might delay the work. Pending this suit, the Chandler-Dunbar Water Power Company generously tendered a quit claim deed to the United States for the required land and after long delay a substituted deed of Jan. 22, 1908, was accepted by the United States. (Rec. p. 81.)

The granted land was, according to Col. Davis, "a very valuable property for which the government might have been asked a very large sum of money." (Rec. p. 221.)

This deed conveyed to the United States a strip of land over 2,500 feet long and averaging 100 feet wide, and considerably lessened the width of the remaining lands of the Chandler-Dunbar Water Power Co., because the conveyance carried more than six acres of land. (Rec. pp. 81-94-352.)

The River and Harbor committee, who reported the condemnation act of March 3, 1909, were informed of this deed in the early part of 1908.

St. Mary's Falls Canal (H. R. 19366) Hearings before the Committee on Rivers and Harbors of the House of Representatives of the United States. Sixtieth Congress. First Session, page 155.

The Chandler-Dunbar Water Power Co. did not intend to go out of business after giving the deed. Its land and place of business was lessened, and some changes were made necessary, which the company asked the United States officials to make, as will be seen by the letter of the president of the company to U. S. Assistant Engineer Sabin. (Rec. pp. 218-220.)

The hopes and expectations of the respondent of continuing in business as shadowed forth in the said letter of the President of the Company were to be shattered by the act of March 3, 1909. After receiving in 1908 the deed for the widening of the canal, the United States in 1909 proceeded to take all the remaining lands, water power and property of every name and description of the Chandler-Dunbar Water Power Co. north of the ship canal.

Recognition of Honorary Obligation—

Power of Congress.

It may be said that even if the company had certain hopes and expectations and was influenced thereby in giving the deed, Congress was not thereby placed under legal obligations to the company. A tract of land in time of need, for which a large sum of money could reasonably have been asked, had been given by respondent. It could probably at law recover nothing therefore. Congress, however, had the power to recognize an honorary obligation. Discussing the constitutionality of a law which provided for giving bounties to producers of sugar, this court said:

> "Payments to individuals, not of right, or of a merely legal claim, but payments in the nature of a gratuity, yet having some feature of moral obligation to support them, have been made by the government, by virtue of acts of Congress appropriating the public money, ever since its foundation. Some of the acts were based upon considerations of pure charity." U. S. v. Realty Co., 163 U. S. 427.

The value of the use for navigation purposes of a small fractional part of a water power, the principal part of which was to be leased by the United States, would not compare with the value of the six acres of land given by the respondent to the United States for canal widening purposes. It was within the power of Congress to provide for compensation for all the

water power of respondent, even though a small fraction thereof could have been appropriated without compensation.

Dow vs. Elec. Co., 68 N. H., 59;
Elec. Co. vs. Dow, 166 U. S., 489;
Lewis Em. Domain, Vol. I, Sec. 410, 3rd Ed.;
Matter of City of New York, 190 N. Y., 350;
Dodge vs. Rockport, 199 Mass., 274;
Earle vs. Com., 180 Mass., 579.

In Dow vs. Electric Co., supra, the act required that 50 per cent be added to the verdict.

In matter of City of New York, supra, the Court, quoting from the opinion in the case of Monongahela Nav. Co., 148 U. S., 312, to the effect that it did not rest with Congress to say what compensation should be paid, said, p. 354:

> "Of course this is true only in one direction; that is to say, that as the right to exercise the power of eminent domain must proceed from legislative authority, the legislature may require more liberal compensation than that which would satisfy the constitutional requirement, but it cannot direct that anything less than just compensation shall be made."

In Earle vs. Comm., supra, the statute provided compensation where the injury could have been authorized without provision for payment. The act was claimed to be unconstitutional. The Court said, p. 582:

> "The test of what may be required to be paid for, if destroyed or damaged under the power of eminent domain, is not whether the same thing could have been sold, nor is it whether the destruction or harm could have been authorized without a provision for payment. Very likely the plaintiff's rights were of a kind that might have been damaged if not destroyed without the constitutional necessity of compensation. But some latitude is allowed to the legislature. It is not forbidden to be just in some cases where it is not required to be by the letter of the paramount law. We think it is so plain that, as was assured by everybody in Sawyer vs. Metropolitan Water Board, 178 Mass., 267, the provision is constitutional, that we prefer to say so without stopping to consider whether the question is open."

The provisions of the Act of March 3rd, 1909, distinguish the case at bar from the following cases: Scranton vs. Wheeler,

179 U. S. 141; Gibson vs. U. S., 166 U. S. 269; Northern Transportation Co. vs. Chicago, 99 U. S. 635; Bedford vs. U. S., 192 U. S. 217.

In each of these cases it was held the injuries were consequential and that there was no taking.

In Bedford vs. U. S., 192 U. S. 217 (1904), the United States had built a revetment along the banks of the Mississippi River. Damages were claimed and denied for erosion and overflow. The revetment was neither upon nor in contact with claimant's land. The revetment consisted of willow matresses weighted down by stones. Mr. Justice McKenna said, at 224:

> "There is another principle by which the rights of riparian property and the power of the government over navigable rivers are better accommodated. It is illustrated in many cases.
>
> The constitution provides that private property shall not be taken without just compensation, but a distinction has been made between damage and taking, and that distincition must be observed in applying the constitutional provision. An excellent illustration is found in Gibson v. United States, 166 U. S. 269. The distinction is there instructively explained, and other cases need not be cited."

The act of March 3, 1909, sets at rest any question about a "taking." It especially provides for a taking and for compensation for what was taken.

Presumption of Knowledge by Congress of the Situation and Opportunity for Knowledge.

This Court has said:

> "But it is well settled that the courts always presume that the legislature acts advisedly and with full knowlelge of the situation. Such knowledge can be acquired in other ways than by the formal investigation of a committee, and courts cannot inquire how the legislature obtained its knowledge. They must accept its action as that of a body having full power to act and only acting when it has acquired sufficient information to justify its action." (Chesapeake &. P. Tel. Co. v. Manning, 186 U. S. 245.)

When the Act of Congress of March 3, 1909, was passed, Congress knew of the water power in the River St. Mary and

knew that corporations were utilizing the water power. This appears in Sec. 11 of the Act which allows the Secretary of War in his discretion to permit the Chandler-Dunbar Water Power Company and the Edison Sault Electric Company for a limited time to maintain their present works and utilize the water power in said river until they shall be paid the compensation awarded by the court for their property condemned under the provisions of this section.

The report of the American Section of the International Waterways Commission, Dec. 1, 1905, to be found in the annual report of the Secretary of War for 1905, App. F. p. 319, shows little water needed for operation of the canals.

> "The volume of water flowing out of Lake Superior is, at normal low water elevation 601—about 64,000 cubic feet per second.
>
> * * * * * *
>
> "The quantity of water consumed in the operation of the canals during the eight months of navigation is about 1,200 cubic feet per second. The quantity required in the future will be greater. Not less than 4,000 cubic feet should be unconditionally reserved for canal uses, and in granting power privileges the respective governments should not forfeit the right to increase the amount indefinitely. It may be remarked in passing that raft navigation over the rapids has so greatly diminished and is now so small in amount that the quantities of water above mentioned will suffice to provide for it. This leaves about 60,000 cubic feet which may be temporarily used for power purposes." (Rec. p. 202.)

Thus Congress had opportunity to know that appurtenant to the American shore was a flow of over 30,000 cubic second feet of water, not presently needed for public purposes. Congress made provision for developing this water power and for leasing the excess water.

If there is any doubt about the construction of the Act of March 3, 1909, the Court may refer to the report of the committee on rivers and harbors which accompanied the bill that became the condemnation law.

The Collector v. Richards, 23 Wall., 246-258;
Church of Holy Trinity v. U. S., 143 U. S., 457;
American Twine Co. v. Worthington, 141 U. S. 468.

INTENT OF CONGRESS

PRESUMPTION OF KNOWLEDGE

The report of the committee on rivers and harbors shows that that part of the water power which the government did not own was to be acquired by the United States by condemnation. Upon this point the committee reported:

> "As there is a water power in this stream, a part belonging to the United States and a part to be acquired by the condemnation of the private rights in question, the section provides that this water power may be conserved by the government and used directly for its own purposes or leased by the Secretary of War." (Rec. p. 203.)

The Court found:

> "The volume of flow of 4,000 c. s. f. would provide for the passage of 1,000,000,000 tons of freight per annum, according to present methods, and for all forest products now passing." (Rec. p. 95.)

We search in vain in the Act of Congress and instrument of appropriation, for any claim that the water power was not taken, but was appropriated by virtue of the easement of navigation. Some such statement should appear to support the contention of the United States.

Sanitary District v. P. F. & Cy. Ry., 216 Ill. 575.

In Sanitary District case, supra, a part of the property to be taken was subject to the easement of navigation. The Court said, p. 578:

> "As a matter of fact, the easterly part from the dock line to the center of the river was submerged by the waters of a navigable stream, and was already subject to the easement of navigation."
>
> "The statute requires a petition setting forth a description of the property sought to be taken with the names of the persons interested, as owners or otherwise, and if the estate sought to be condemned is a limited one or subject to conditions or restrictions, either in the title or mode of use, or if it is encumbered by some public easement or right, it should be set out in the petition. The averments of the petition as to the nature or extent of the estate or title of the defendants', are not binding on the defendants, and upon a proper issue the court may determine such questions, but such averments are binding on the petitioner and the defendants are not required to establish their title. (Peoria and Rock Island Railway Co. vs. Bryant, 57 Ill. 473.) If a corporation entitled to exer-

cise the right of eminent domain claims that it already has a right to take land, a petition for condemnation is not the proper proceeding to try that question. It was the duty of the petitioner to ascertain the title to the premises before commencing the proceeding and to name in the petition the owner of the premises, and if the title was less than a fee simple or subject to an easement it should have been stated in the petition. (Peoria, Pekin and Jacksonville Railroad Co. vs. Laurie, 63 Ill., 264.) There was no averment on the subject in the petition, and so far as it was concerned, the defendants were to be regarded as the owners of an unencumbered title."

II.

BASIS OF VALUATION.

Federal Easement.

If Congress did not intend to pay for the water power of the C. D. Co., unless compelled so to do by the Constitution, then it should be valued in behalf of the riparian, in view of the fact that, when taken, it was subject to the right of the United States to use it for purposes of navigation. Subject to such right, the property was in the riparian. As against the United States the rights of a riparian are irrefragable except so far as in conflict with the public right of navigation. (Note 1.)

NOTE 1 — Avery vs. Fox, Fed. Case No. 674 (1868);
United States vs. Lynah, 188 U. S. 445(1902) (rice plantation on Savannah river);
Bigham Bros. vs. Port Arthur, 100 Texas, 192 (1906), (rice plantation setting back salt water through Sabine Pass into fresh water);
Union Depot vs. Brunswick, 31 Minn., 297, at 301 (1883);
Lewis Em. Dom., Vol. 1, Sec. 69;
G. B. & M. Canal Co. vs. Kau. W. P. Co., 70 Wis., 635 (1888);
Ex parte Jennings, 6 Cow., 519 (1826);
Varick vs. Smith, 5 Paige, Ch. 137 (1835);
Varick vs. Smith, 9 Paige, Ch. 547 (1842);
Canal Com'rs vs. Kempshall, 26 Wendell, 404 (1841);
Dermott vs. New York, 99 N. Y., 101 (1885);
Walker vs. Board of Public Works, 16 Oh., 540 (1849);
Minn. vs. Minneapolis Milling Co., 26 Minn., 229 (1879);
Kau. W. P. Co. vs. G. B. & M. Canal Co., 142 U. S., 254 (1891);
United States vs. Great Falls Mfg. Co., 112 U. S., 645 (1884);
Great Falls Mfg. Co. vs. United States, 124 U. S., 581 (1888);

FEDERAL EASEMENT

How far should the **valuation** of water power be **reduced** on account of the control of Congress over navigable waters?

The control of Congress only extends to the preservation and improvement of navigation.

This rule of property leaves the water power valuation to be diminished only by the volume of flow and subaqueous space necessary to navigation, and the necessary obstructions by works of improvement and the rights of the State for public uses.

All the control of Congress over navigable waters grows out of the simple provision of the constitution granting to Congress the right "to regulate commerce with foreign nations and among the several states" (Art. I, Sec. 8, clause 3). Otherwise than so far as necessary "to regulate commerce with foreign nations and among the several states," Congress

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Haslam vs. Railroad, 64 Ill., 353 (1872);
Beidler vs. San. Dist., 211 Ill., 628 (Lowering channel in So. Ch. River);
Janesville vs. Carpenter, 77 Wis., 288, cited with approval in Kau. W. P. Co. vs. G. B. & M., 142 U. S., 271; also cited with approval in Grand Rapids vs. Powers, 89 Mich., 94 at 115;
Grand Rapids vs. Powers, 89 Mich., 94; cited with approval in Priewe vs. W. S. L. & I. Co., 93 Wis., 534, 547-8;
King vs. U. S., 59 Fed., 9;
Williams vs. U. S., 104 Fed., 50;
Farnham, V. 1, Sec. 29, p. 137, "The right of public navigation is not such as to destroy the rights of the riparian owner."
See also 44 Mich., 229, People's Ice Co. vs. Excelsior, public right is for passage only;
Farnham, Vol. 1, p. 138, Sec. 29;
Farnham, Vol. 1, p. 410, Sec. 86;
Priewe vs. W. S. L. & I. Co., 93 Wis., 534, 547;
Middleton vs. Booming Co., 27 Mich., 533, 535-6;
Koopman vs. Blodgett, 70 Mich., 610, 615-6;
Pearson vs. Rolfe, 76 Me., 380, 386-7, public entitled to ordinary flow;
Monongahela vs. U. S., 148 U. S., 312, 334-5-6-7-8.

has no control over navigable waters. Beyond that the control rests with the State and with the riparian. (Note 2.)

In Martin vs. Waddell, Chief Justice Taney says,

> "For when the revolution took place, the people of each State became themselves sovereign; and in that character hold the absolute right to all their navigable waters, and the soils under them, for their own common use, subject only to the rights since surrendered by the constitution to the general government." (410.)

In Penna. vs. Wheeling Bridge Company, Chief Justice Taney says,

> "By the Constitution of the United States, they surrendered to the general government the power to regulate commerce. And thus, while they retain their absolute territorial jurisdiction over their navigable waters in all other respects, Congress may forbid the erection of any

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NOTE 2 — Martin vs. Waddell, 41 U. S. 367, 410;
Penna. vs. Wheeling Bridge Co., 54 U. S., 518, 582-3;
Penna. vs. Wheeling Bridge Co., 59 U. S., 421, 430;
Gilman vs. Philadelphia, 70 U. S., 713, 724-5;
McCready vs. Virginia, 94 U. S., 391, 394-5;
Bridge Co. vs. U. S., 105 U. S., 470, 489, 506(1881);
Monongahela vs. U. S., 148 U. S., 312, 335;
Shively vs. Bowlby, 152 U. S., 1, 40;
Water Power Co. vs. Water Com'rs, 168 U. S., 349;
U. S. vs. Rio Grande, 174 U. S., 690, 709;
U. S. vs. Rio Grande, 184 U. S., 416, 420;
Leovy vs. U. S., 177 U. S., 621, 632-3;
Union Bridge Co. vs. U. S., 204 U. S., 364, 400;
27 Opinions Attys. Gen., 327, 330-1;
Farnham, V. I, p. 137, Sec. 29;
Report of Special Com. Feb. 25, 1909, to House Com. on Interstate and Foreign Commerce, relative to the relation of the U. S. to the water powers of public navigable rivers;
Report National Waterways Com. 61st Cong., 2nd Session, Senate Doc. No. 301, pp. 23-4;
Report International Waterways Com. on conditions at Sault Ste. Marie, May 3, 1906, page 9.

structure in a navigable stream, which it deemed an obstruction to commerce, and may declare it a nuisance, and direct it to be removed. But all the original authority of the state over the river remains subject to that limitation." (582-3.)

In the second decision in Penn. vs. Wheeling Bridge Co., Mr. Justice Nelson says,

"The bridge had been constructed under an act of the legislature of the State of Virginia; and it was admitted that act conferred full authority upon the defendants for the erection, subject only to the power of Congress in the regulation of commerce." (430.)

In McCready vs. Virginia, Chief Justice Waite says,

"For this purpose the State represents its people, and the ownership is that of the people in their united sovereignty. * * * The title thus held is subject to the paramount right of navigation, the regulation of which, in respect to foreign and interstate commerce, has been granted to the United States." (394.)

In Bridge Company vs. United States, Mr. Justice Field says,

"Now the control of Congress over the bay is as complete and unrestricted as over the navigable streams of the State. Could it in the exercise of its commercial power, that is, in its control over navigation, direct the destruction of the wharves, the buildings, and streets, which have been built where, in 1850, the tide-waters of the bay flowed? I doubt whether any jurist could be found who would hazard his reputation by giving an affirmative answer. And why not? Simply because until the free navigation of the bay for purposes of commerce is impeded, Congress has no power to interfere with the buildings and wharves constructed."

In Monongahela vs. United States, Mr. Justice Brewer says,

"Upon what does the right of Congress to interfere with the matter rest? Simply upon the power to regulate commerce." (335.)

In Shively vs. Bowlby, Mr. Justice Gray says,

"The later judgments of this Court clearly establish that the title and rights of riparian or littoral proprietors in the soil below high water mark of navigable waters are

governed by the local laws of the several States, subject, of course, to the rights granted to the United States by the Constitution." (40.)

"Such title to the shore and lands under water is regarded as incidental to the sovereignty of the State—a portion of the royalties belonging thereto, and held in trust for the public purposes of navigation and fishery—and cannot be retained or granted out to individuals by the United States. Such title being in the State, the lands are subject to State regulation and control, under the condition, however, of not interfering with the regulations which may be made by Congress with regard to public navigation and commerce." (46.)

In Water Power Company vs. Water Com'rs, Mr. Justice Peckham reaffirms the statement made by Chief Justice Taney in Martin vs. Waddell, and says,

"But the principles laid down in all of these cases, necessarily include the right of the State courts to decide, as a matter of local law, the point now under discussion, subject to the acknowledged jurisdiction of the United States under the Constitution in regard to commerce and the navigation of the waters of rivers. The jurisdiction of the State over this question of riparian ownership has been always, and from the foundation of the government, recognized, and admitted by this Court." (366.)

In U. S. vs. Rio Grande, Mr. Justice Brewer says,

"Of course, when such proceedings are instituted it becomes a question of fact whether the act sought to be enjoined is one which fairly and directly tends to obstruct (that is, interfere with or diminish) the navigable capacity of a stream. It does not follow that the courts would be justified in sustaining any proceeding by the Attorney General to restrain any appropriation of the upper waters of a navigable stream. The question always is one of fact, whether such appropriation substantially interferes with the navigable capacity within the limits where navigation is a recognized fact." (709.)

Further note the opinion of Secretary of War Taft "in connection with the development of the Illinois Valley Water Power", given Feb. 23, 1907, and appearing on pages 37-8 of this report.

Relative to this right, the International Waterways Commission says:

"The interests constructing these works claim the right to do so, not only under the permits granted, but, so far as the occupation of the bed of the Rapids opposite the Chandler lands is concerned, by virtue of asserted riparian rights appurtenant to the ownership of the adjacent shore. In a litigation now pending, brought by the United States against the Chandler-Dunbar Water Power Company in the Western District of Michigan, the District Court has decided that the ownership of the shore lands carries with it the title to the bed of the river, including Islands Nos. 1 and 2, and from this it follows that the right to erect structures in the river to utilize the waters of the river for power purposes as it flows past the riparian owners' land, exists, subject merely to the restriction that the structures must not, directly or indirectly, injuriously affect navigation." (Report upon conditions existing at Sault Ste. Marie May 3, 1906, page 9.)

The National Waterways Commission says,

"The commission is of the opinion that the Federal Government has no proprietary right or interest in navigable waters which would authorize the collection of tolls. The right, if it exists at all, rests upon either the second or third theory stated. As regards the second theory, it should be said that the imposition of tolls, unless based upon a more substantial foundation than the mere authority to grant or withhold consent—an authority arising solely from the control of the Federal Government for the purposes of navigation—does not commend itself to the commission, and it is to be doubted whether, even in case a bill should be passed or other action taken by Congress for granting this permission, with a provision for charging tolls, such tolls could be collected." (Preliminary Report United States National Waterways Com., Senate Doc. 301, 61st Cong., 2nd Ses., p. 24.)

Report of Sub-Committee says,

"Where the Federal Government is not interested as the owner of riparian lands, the only interest it has in the water of a stream is as to its use for purposes of navigation, and it can lay no claim to the use of the water for any other purpose, not even for irrigation." (28.)

"In those States which hold that the title of the riparian owner only extends to the high or low water mark the title to the bed of the stream is deemed to be in the State, and whether the title to the bed of the stream is in the riparian owner or in the State, in either case the general title to the water of the stream is deemed to be in the State, but it holds it not absolutely, but in trust for all lawful public uses. The State's interest in such a stream is akin to that of a riparian owner, though more comprehensive and general in its nature and does not exist in hostility to or in diminution of the rights of the riparian owner." (29.)

"In connection with legislation of this kind careful consideration should be given to the question of the limitations of the power of the Federal Government over navigable waters. By virtue of its power to regulate commerce, Congress may exercise control over the navigable waters of the United States, but only to the extent necessary to protct, preserve and improve free navigation. The Federal Government has no possessory title to the water flowing in navigable streams, nor to the land comprising their beds and shores, and hence Congress can grant no absolute authority to anyone to use and occupy such water and land for manufacturing and industrial purposes." (35.)

"Regarding the proposition to empower the Secretary of War to authorize the use and development of water power at localities not improved by the United States, it should be borne in mind that natural water power—that is, power made available by the existence of natural falls and rapids in a river—is appurtenant to riparian ownership, and the right to use it is governed by State laws on the subject of private property. As above set forth, the Federal Government can regulate and control it only to such extent as may be necessary in the interest of navigation. (36.) (Report Sub. Com. 2nd Session Cong., Feb. 25, 1909.)

Reversion.

The owner cannot be deprived of right of reversion after termination of easement except upon payment of just compensation. (Note 2a.)

Body of the Estate.

Water power is not an easement but the body of the estate, inseparably annexed to the soil itself. (Note 3.)

This rule holds good on public navigable streams as well as on private streams. (Note 4.)

NOTE 2a—Remey vs. Iowa Central Railway Co., 116 Ia., 133;
Pittsburgh & Lake Erie Railroad Co. vs. Bruce, 102 Pa., 23, 33-4;
Heard vs. Brooklyn, 60 N. Y., 242, 246-7;
Lewis Em. Dom., Sec. 861 (596), Note 38.

NOTE 3 — Johnson vs. Jordan, 43 Mass., 234;
Cary vs. Daniels, 49 Mass., 466, 480 (1844);
Standen vs. New Rochelle Water Company, 91 Hun., 272; 36 N. Y. S., 92 (1895);
Tourtellot vs. Phelps, 70 Mass., 370, 376 (1855);
Gould vs. Boston Duck Company, 79 Mass., 442, 450 (1859);
Parker vs. Griswold, 17 Conn., 288, 299 (1845);
Crittenton vs. Alger, 52 Mass., 281 (1846);
Blanchard vs. Baker, 8 Maine, 253 (1832);
Tillotson vs. Smith, 32 N. H., 90, 94 (1855);
Keeney & Wood Mfg. Co. vs. Union Mfg. Co., 39 Conn., 576, 582 (1873);
Brown vs. Bush, 45 Pa. St., 61 (1863);
Gould on Waters, Section 204.

NOTE 4 — Morrill vs. St. Anthony's Falls W. P. Co., 26 Minn., 222, Mississippi River (1879);
G. B. & M. Canal Co. vs. Kaukauna W. P. Co., 70 Wis., 635, 649, 653, Lower Fox (1888);
Kaukauna W. P. Co. vs. G. B. & M. Canal Co., 75 Wis., 385, 390, Lower Fox (1890);
Kimberly & Clark Company vs. Hewitt, 79 Wis., 334, Lower Fox (1891);
Kaukauna W. P. Co. vs. G. B. & M. Canal Co., 142 U. S., 254, 276 Lower Fox (1891);

Such right of the riparian is, however, subject to the uses of the waters of public rivers for public purposes, among which are navigation and fishing, and, perhaps, domestic supply of water for cities.

The act of Congress provides for the renting of the water power. This puts the power of this public river in the category of proprietary right and not governmental right. Surely we are entitled to compensation for what the United States takes from us to rent for revenue. IT WOULD SEEM THAT THE COMPENSATION FOR THIS WATER POWER COULD NOT BE LESS THAN THE CAPITALIZATION NECESSARY TO PRODUCE A REVENUE EQUAL TO THE PROBABLE RENTS AVAILABLE TO THE UNITED STATES.

We suspect the soundness of legal rules, the application of which results in giving the riparian substantially less of value than the evident property—proprietary—value presently acquired by the United States by the taking.

The maxim, "by their fruits ye shall know them," applies as closely to rules of action as to persons.

Grounds of **impairment of valuation** urged by opposing counsel,

First. No Limitation on Dominant Estate.

The fundamental point on which all briefs of opposing counsel in the trial Court rested and to which we do not assent, is this: Counsel claim that the riparians' property taken

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Varick vs. Smith, 9 Paige, 547;
Walker vs. Board of Public Works, 16 Oh., 540, 543-4 (1847);
Lewis on Eminent Domain, Vol. 1, Secs. 61, 69;
Avery vs. Fox, 2 Fed. Cas. No. 674, 3rd, 4th and 5th columns (1868);
Holyoke W. P. Co. vs. Conn. River Co., 52 Conn., 570 (1884);
United States vs. Great Falls Mfg. Co., 112 U. S., 645 (1884);
Great Falls Mfg. Co. vs. U. S., 124 U. S., 581 (1888).

should be valued on the basis that, if it had not been taken, it might have been made valueless by arbitrary action of Congress purporting to be in aid of navigation—that is, nothing is taken which Congress might not have destroyed or prevented the use of. Hence, "just compensation" is "six cents".

When definitely stated, the proposition is startling. If sound, the United States may take any and all hydraulic power of navigable rivers, improved as well as unimproved, without making compensation.

The position is not sound. The easement of the United States is paramount, but not exclusive. Where, as in this case, there is an estate,—Water power—subject to a dominant easement—right of navigation and to improve same—the relation of the parties requires that the easement shall be so enjoyed as to be least burdensome to the servient estate. (Note 5.) Hence the question is not, How much might the servient estate—water power—be burdened by operations in aid of navigation and thereby diminished in value? but this: How might operations in aid of navigation be so carried on as to leave the water power of the most value to the owner? (Note 5.)

In McKell vs. Collins, the Court said,

> "Whether plaintiffs have used 'their own judgment fairly in laying out the way' is the question for determination in this suit. If it is found, as the plaintiffs contend, that they have so used their judgment, then their action should be sustained; but if, on the other hand, it is found that they have arbitrarily exercised their reserved rights, to the great damage and danger to the interests of the

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NOTE 5 — McKell vs. Collins Colliery Co., 46 W. Va., 625, 633-4;
Chandler vs. Goodridge, 23 Me., 78, 83;
Bissell vs. Grant, 35 Conn., 288;
Wille vs. Bartz, 88 Wis., 424, 428;
Dyer vs. Walker, 99 Wis., 404, 407;
Bennett vs. Seligman, 32 Mich., 500-1;
Grafton vs. Moir, 130 N. Y., 465, 471-2-3;
Wilson vs. Scranton, 141 Pa. St., 621;
Butchers vs. Com'lth, 169 Mass., 103, 117;
Clark vs. Worcester, 125 Mass., 226, 231;
Los Angeles vs. Pomeroy, 124 Cal., 597.

lessee, they should be restrained in such arbitrary and unreasonable exercise of rights reserved to them.

* * * * * * If not, appellants might so exercise their 'reserved rights' as to drive appellee from its lease, or quite destroy its business." (633-4.)

From Chandler vs. Goodridge:

"But in doing this he could not unnecessarily deprive the other party of any of the rights, which flow from his title to the fee in the land; he could not, unless essential to his own privilege, exclude the defendants from any use, to which they might wish to appropriate the land." (83.)

From Clark vs. Worcester:

"For all purposes consistent with that enjoyment, the right to use the land remains in the owner of the fee." (231.)

From Butchers vs. Commonwealth:

"The rights of the commonwealth are limited to the easement taken." (117.)

If A has a corn field subject to easement in B to pass over same to his adjoining corn field, location of place of passage at B's option, is A's corn field of no value because there is not, until the way is located by B, any spot on A's land upon which B may not be entitled to tread?

Have we lost sight of the old maxim, "So use your own as not to injure that of another?"

But it may be said that the United States is the sovereign, —that it may decline to locate,—decline to specify any spot over which it will refrain from passage.

Is the sovereign,—the guardian of the law,—superior to the law? (Note 6.)

NOTE 6 — Woodruff vs. Trapnall, 51 U. S., 190 (1850);
United States vs. Willamette Val. Co., 54 Fed., 807, 811-2 (1892);
Indiana vs. Milk, 11 Fed., 389, 397 (1882);
People vs. Michigan C. R. Co., 145 Mich., 140 (1906).
U. S. vs. Arredondo, 31 U. S., 691, 712 (1832);
U. S. vs. Walker, 139 Fed., 409, 412 (1905);
U. S. vs. Ch. D. W. P. Co., 152 Fed., 25 (1907).

FEDERAL EASEMENT

LIMITATION

In Woodruff vs. Trapnell, Mr. Justice McLean said,

> "We naturally look to the action of a sovereign state to be characterized by a more scrupulous regard to justice, and a higher morality than belong to the ordinary transactions of individuals." (207.)

This is quoted with approval in United States vs. Willamette Val. Co. (811-2).

In Indiana vs. Milk, Judge Gresham said,

> "Resolute good faith should characterize the conduct of states in their dealings with individuals, and there is no reason in morals or law that will exempt them from the doctrine of estoppel" (397).

In People vs. Michigan Central Railroad Company, Judge Grant said,

> "When the state enters into purely contractural relations with its citizens, it should be bound by the same rules of construction that bind its citizens with whom it contracts. * * * * * * * * *
>
> The state, of all parties contracting, should deal fairly and honestly with its citizens" (160).

In United States vs. Arredondo, Mr. Justice Baldwin said,

> "By consenting to be sued and submitting the decision to judicial action, they have considered it as a purely judicial question, which we are now bound to decide as between man and man on the same subject matter" (712).

In United States vs. Walker, Judge Jones said,

> "When the sovereign sues, he brings with him no privileges which exempt him from the common fare of suitors" (412).

Is it now suggested that the property of the citizen is compartively valueless on account that the United States may

> "in the conduct of its own affairs, without regard to the principles it represents, perpetrate upon its citizens wrongs which it would promptly condemn if practiced by one of them upon another"?

Such a course was condemned by Judge Severens in U. S. vs. C. D. W. P. Co., 152 Fed Rep. 25, at 41.

There is abundant authority to effect that the public right of navigation and the private right to water power are in a

certain sense correlative notwithstanding the paramountcy of the public right. (Note 7.)

And that the right of navigation, though paramount, is not exclusive in waters navigable in the largest sense. (Note 8.)

Second. In trial Court reference was made to

Sovereign and Inherent Power.

Kansas vs. Colorado (206 U. S., 46), presented a contention on the part of Kansas that in Colorado the riparians were by authority of the State, withdrawing from the Arkansas River, for the purposes of irrigation, so large a ratio of the water of the river as to affect the river seriously in Kansas. The United States, upon leave, filed its petition of intervention. This petition stated that the Arkansas River is not navigable in the

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NOTE 7 — Buchanan vs. Grand River & G. L. R. Co., 48 Mich., 364;
Woodin vs. Wentworth, 57 Mich., 278, 282;
Koopman vs. Blodgett, 70 Mich., 610, 616-7;
Pearson vs. Rolfe, 76 Me., 380, 385-6-7;
Stratton vs. Currier, 81 Me., 497, 504-5;
Thompson vs. Androscoggin R. I. Co., 58 N. H., 108, 110-1;
Connecticut R. Lum. Co. vs. Olcott Falls Co., 65 N. H., 290, 384-5, 392;
Chenango Bridge Co. vs. Paige, 83 N. Y., 178, 185;
Barclay R. & C. Co. vs. Ingham, 36 Pa., 194, 201-2;
Newbold vs. Mead, 57 Pa., 487, 491-2;
Snow vs. Parsons, 28 Vt., 459.

NOTE 8 — People's Ice Co. vs. Excelsior, 44 Mich., 229 (Ice fall in Detroit River);
Bishop vs. Baldwin, 147 Mich., 22, 27 (Fishing in St. Mary's River);
Wright vs. Mulvaney, 78 Wis., 89 (Fishing in Green Bay);
Cobb vs. Bennett, 75 Pa., 326, 329 (Fishing in Deleware River);
Hopkins vs. Norfolk & S. R. Co., 131 N. C., 463-4-5 (Fishing in Scuppernong River).

States of Colorado and Kansas, but is navigable in the State of Arkansas and Indian Territory. That within the water shed there were 1,000,000 acres of public lands requiring irrigation to make them habitable and salable. The Attorney General contended (64-5) in behalf of the United States that:

> "There is a conflict which only the national sovereignty is competent to settle."

Speaking of this question of inherent power, Mr. Justice Brewer says (p. 89):

> "Appreciating the force of this, counsel for the government relies upon 'the doctrine of sovereign and inherent power,' adding 'I am aware that in advancing this doctrine I seem to challenge great decisions of the Court, and I speak with deference.' His argument runs substantially along this line: All legislative power must be vested in either the State or the National Government; no legisaltive powers belong to a State government other than those which affect solely the internal affairs of that State; consequently all powers which are national in their scope must be found vested in the Congress of the United States. But the proposition that there are legislative powers affecting the nation as a whole which belong to, although not expressed in, the grant of the powers, is in direct conflict with the doctrine that this is a government of enumerated powers. That this is such a government clearly appears from the Constitution, independently of the amendments, for otherwise there would be an instrument granting certain specified things made operative to grant other and distinct things."

But if the sovereign, the United States, intended to take the water power without compensation, by declaring that the same "is necessary for the purposes of navigation," as was urged below, the law making power is not supreme. The courts are not powerless to protect the subject. (Note 9.)

NOTE 9 — Janesville vs. Carpenter, 77 Wis., 288 (1890);
Stevens Point Boom Co. vs. Reilly, 46 Wis., 237 (1879);
Cohn vs. Wausau Boom Co., 47 Wis., 314 (1879);
Conn vs. Little Suamico, 74 Wis., 652 (1889);
Grand Rapids vs. Powers, 89 Mich., 94, 102, 104 (1891);

Janesville vs. Carpenter involved the validity of an act of the Wisconsin legislature forbidding the erection, by a riparian, of a building in the bed of a public navigable river, which building did not interfere with navigation. The Court held the act unconstitutional and void as an unjustifiable attempt to interfere with a property right of a riparian. In expressing the opinion of the Court, Justice Orton quoted from an opinion of Mr. Justice Chase of the Federal Supreme Court the following vigorous language:

> "I cannot subscribe to the omnipotence of a state legislature, or that it is absolute and without control, although its authority should not be expressly restrained by the constitution or fundamental law of the state. * * * The nature and ends of the legislative power will limit the exercise of it. * * * There are certain vital principles in our free republican government which will determine and over-rule an apparent and flagrant abuse of legislative power,—as to authorize manifest injustice by positive law, or to take away that security of personal liberty or private property for the protection whereof the government was established. An act of the legislature (for I cannot call it a law) contrary to the great first principles of the social compact cannot be considered a rightful exercise of legislative authority." (303.)

Grand Rapids vs. Powers involved the power of the legislature to authorize a city to establish a dock line across the land of the riparian, and thereby exclude him from improving for water power, an unnavigable part of the river. Therein Justice Morse said,

> "The police power of the legislature of this State is not omnipotent. It cannot, under the guise of regulation, destroy property rights arbitrarily and without reason." (113.)

In Chenango Bridge Company vs. Paige, Justice Earl said,

> "The Legislature, except under the power of eminent domain, upon making compensation, can interfere with

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Chenango Bridge Co. vs. Paige, 83 N. Y., 178 (1880);
Lewis, Em. Dom., Sec. 70;
Knoxville vs. Water Company, 212 U. S., 1, 18.

such streams only for the purposes of regulating, preserving and protecting the public easement. Further than that, it has no more power over these fresh water streams than over private property. It may make laws for regulating booms, dams and bridges only so far as is necessary to protect and preserve the public easement, and when it goes further, it invades private rights protected under the constitution." (185.)

Lewis on Eminent Domain says, referring to Janesville vs. Carpenter,

"A statute making it unlawful to drive piles or build piers, cribs or other structures in the bed of a private navigable river without regard to whether the same obstruct navigation was held invalid as depriving the riparian owners of their property without compensation and without due process of law." (V. 1, Sec. 70.)

In Knoxville vs. Water Company, Mr. Justice Moody says,

"The Courts ought not to bear the whole burden of saving property from confiscation, though they will not be found wanting where the proof is clear. The legislatures and subordinate bodies, to whom the legislative power has been delegated, ought to do their part. Our social system rests largely upon the sanctity of private property, and that State or community which seeks to invade it will soon discover the error in the disaster which follows. The slight gain to the consumer, which he would obtain from a reduction in the rates charged by public service corporations, is as nothing compared with his share in the ruin which would be brought about by denying to private property its just reward, thus unsettling values and destroying confidence." (18.)

In case of plain attempts to do injustice, Courts do not hesitate to interfere with official action within the sphere of official control. (Note 10.) Courts are ingenious to invent methods to secure justice.

NOTE 10—Priewe vs. Wisconsin, 93 Wis., 534, 552;
Priewe vs. Wisconsin, 103 Wis., 537, 549;
Minnesota vs. Barber, 136 U. S., 313, 320;
Henderson vs. N. Y., 92 U. S., 259, 268;
People vs. Compagnie, 107 U. S., 59, 63;
Mugler vs. Kansas, 123 U. S., 623, 661;
Goodfellow Tire Company vs. Com'r of Parks,

In the first case, Priewe vs. Wisconsin, the Court said,

> "The legislature had no power under the guise of legislating for the public health to authorize the destruction of the lake." (552.)

In the second case, Priewe vs. Wisconsin, the Court said,

> "The Court is not concluded by the wording of the act as to where the truth lies. Otherwise private property rights could easily be taken away from owner, and with or without consideration, vested in another, under the guise of the promotion of some public purpose falsely recited in a legislative enactment." (549.)

In People vs. Compagnie, the Court said,

> "A State cannot make a law designed to raise money to support paupers, to detect or prevent crime, to guard against disease, and to cure the sick, an inspection law, within the constitutional meaning of that word, by calling it so in the title." (63.)

We are not confronted with the problem of how to compel the sovereign to do right, but with the question, Shall we grant immunity to the sovereign because of the difficulty in hindering its doing wrong?

The question is not, How far might the United States by unfriendly legislation, or unfriendly official action, defeat the proper and beneficial use of our property? But rather this: What valuable use can be made of our property without substantial interference with navigation?

It is for the common good that the most shall be made of all natural resources. This would require of Congress and the War Department such action as would give the riparian greatest and most complete use of his water power consistent with the full development of navigation along lines of least interference with water power.

Counsel seem inclined to the idea that our water power is to be valued on the basis, or supposition, that the Congress and the War Department will so order the conduct of navigation as to interfere to the utmost extent with the development of water power. On the other hand, we must suppose that the conduct of navigation will be so ordered as that, along with its fullest development, there may also be the fullest development of the private interests of the riparian. We must suppose that the Federal Government will act as a nursing mother rather than as a devouring wolf.

Third. On trial, claim was made that riparians' water power was valueless on account that a necessary condition of the use thereof was a license from the War Department.

License or Certificate.

Practically, the value of the property is not diminished by the fact that license, or certificate of non-interference, must be obtained from the War Department to make such improvements as will not interfere with navigation. It does not appear on what grounds Congress or the War Department could rightfully refuse a certificate of non-interference with navigation in any case wherein that was the fact. Presumably same may always be obtained (Note 11.) To refuse same would be putting Congress, or the War Department, on the level with the "dog in the manger." It cannot be supposed that either Congress or the War Department would be willing to assume such a position.

Attorney General Wickersham says,

> "In determining the extent of the power thus conferred upon the Secretary of War and the Chief of Engineers, it should be kept in mind that Congress derives its power over the navigable waters within the several States solely from the Commerce clause of the Constitution (Gibbons vs. Ogden, 9 Wheat., 1, 186); and that, inasmuch as a power can be no broader than the source from which it is derived, Congress has no power, either directly or through an agent, to require or prohibit the doing of any act upon navigable waters, unless such act may affect interstate or foreign commerce. This limited jurisdiction of Congress has been recognized in numerous cases decided by the Supreme Court of the United States, beginning with the leading case of Gibbons vs. Ogden, supra, and ending with Kansas vs. Colorado (206 U. S., 46), wherein it was held, as expressed in the syllabus, that—

NOTE 11—27 Opinions Attys. Gen., 286-7-8;
Report Spec. Com. to House Com. on Interstate and Foreign Com., Feb. 25, 1909, pp. 37-8;
Cobb vs. Comrs. of Lincoln Park, 202 Ill., 427;
Gen. McKenzie's interpretation before R. and H. Com., April 1, 1908;
People vs. Grand Rapids, 164 Mich., 121, 131.

'While Congress has general legislative jurisdiction over the Territories and may control the flow of water in their streams, it has no power to control a like flow within the limits of a State, except to preserve or improve the navagability of the stream; that the full control over those waters is, subject to the exception named, vested in the State.' " (286-7.)

"With respect, therefore, to your further inquiry as to whether or not, in passing upon the placing of obstructions in the navagable waters of the United States, the Secretary of War and the Chief of Engineers may, in the application of authority which is conferred in the enactment above cited, consider questions relating to other interests than those having to do with the navagation of the waters in which the obstruction is placed, I must express the opinion that no such consideration should be entertained, and that the mere fact that the placing of a structure in navigable waters might occasion an incidental injury to a bathing beach or the impairment of bathing facilities, or other reasons of similar character not having direct relation to the navigable capacity of the waters or their use to the prosecution of interstate and foreign commerce, should not operate to prevent the approval of a plan otherwise proper and which would otherwise meet with the approval of the Chief of Engineers and the Secretary of War." (288.)

In his opinion "concerning the authority of the United States over the use of water for power purposes," Secretary of War Taft says,

"The truth is that the Des Plaines River, not being a navigable stream, no permit was necessary to put any obstruction into it which the War Department could prevent. **But even if it had been a navigable stream, and even if the application had been made, and properly made to this department to say whether this would interfere with navigation, if the department concluded it would not interfere with navigation, then it is not within the power of the department to withhold its expressing such an opinion and granting such a permit, so far as the United States is concerned, for the purpose of aiding the State in controlling the water power.** If the State has any control over the water power, which it may exercise in conflict with the

claimed rights of the riparian owner, then it must exercise it itself, through its own legislation and through its own executive officers. All the United States does, assuming it to be a navigable stream, is merely to protect the navigation of the stream. **With reference to the water power, it has no function except in respect to water power which it itself creates by its own investment, in property that it itself owns**; and then, of course, it may say how that water power shall be used.

But with respect to the water power on a navigable stream, which may be exercised without interference with the use of the river for navigation purposes, that is controlled by the laws of the State. It is controlled by the riparian ownership and by the common law as it governs those rights. Therefore I do not see, with reference to this matter, that this department has any function to perform or which it can perform." (Report of Sub. Com. on Dams and Water Power, Feb. 25, 1909, pp. 37-8.)

In Cobb vs. Com'rs of Lincoln Park, the Court said, after mentioning Scranton vs. Wheeler,

"But however that may be, we are of the opinion that the act prohibiting the erection of wharves without the consent of the Secretary of War is a mere regulation for the benefit of commerce and navigation, and that **the license or permission of the Secretary of War is only a finding and declaration of such officer that such proposed structure would not interfere with, or be detrimental to, navigation,** and not that it is equivalent to a positive declaration by the authority of Congress that the licensee may build the wharf or other structure without first obtaining the consent of the owner of the submerged land on which it is his purpose to build. Appellant not having, by the law of the State, the right to construct a wharf over his neighbor's submerged lands without his neighbor's consent, could not acquire that right without his neighbor's consent, by obtaining a license from the Secretary of War." (438.)

The nature and object of license to enter upon a public navigable river for purposes of water power development is discussed in People vs. Grand Rapids. The conclusion is that the only restriction to be placed upon the licensee, and the

only conditions of the license, should be such as are desirable to protect the public. Justice Ostrander says,

> "From the viewpoint of the Constitution of 1850 and the statute, the private privilege to dam is against the public privilege to navigate the stream, the preservation of which public privilege gave rise to the necessity for withholding the private right in proper cases. It is therefore difficult to see a reason for attaching to the privilege to build one dam the condition that two other unrelated dams should be built." (131.)

See also Gen. McKenzie's interpretation of the license before the River and Harbors Committee, April 1, 1908, in dialogue between Representative Young and Gen. McKenzie.

Among other things the following was said:

> "The Chairman: Have you considered those licenses as granting any right or equities to the parties?
>
> General McKenzie: No, sir; we have ourselves at times objected to the word 'permit,' on the ground that the War Department, acting under this law, does not grant any permit. It virtually, by its action, decided that this would not be an obstruction to navigation, therefore the law did not prohibit it. As the word 'permission' is used, I think in the law, it has been, through the Legal Department, decided that it was necessary to get one of these papers." (R. .....)

Fourth. On trial, claim was made that riparians' power was of little value because

Licenses Revokable.

The fact that the licenses ordinarily issued are nominally revokable at the pleasure of the Secretary of War does not probably invalidate the license, even when revoked. The license itself is a certificate that the works will not, in the opinion of the War Department, interfere with navigation. The fact that the licenses were taken revokable at the pleasure of the Secretary of War can be explained only on the ground of duress. The Secretary of War, on account of his official position, refuses a license on other terms, and the party entitled as of right to the license revokable only upon the arising of conditions under which it ought not to stand, takes it revokable at the pleasure of the Secretary of War under duress.

(R. 188, 215.) Hence that clause in the license is void. (Note 12.)

If the act of March 3, 1899, should be construed as vesting arbitrary power in the Secretary of War and subjecting every riparian owner to his will, and giving him power to discriminate, that is, to impose or omit to impose different conditions on different owners, then the statute would be void. (Note 13.)

Fifth.—No Right of Access.

On trial below, in order to depreciate the value of the C.-D. Co.'s water power property, it was urged that that company had no right of access to such property.

It was then said,

> "There is no way of necessity against the United States."

We feel no obligation to consider the legal aspects of that question. The question is not, Is there a "way of necessity"? or Could the riparian compel the location of a way? The real question is this: Can the United States take very useful, very valuable property for nothing, because it could, by putting itself on the level of the "dog in the manger" make the same valueless in the hands of one of its citizens? In view of the fact that the United States has received, substantially, as a gift, very valuable lands for canal purposes from the C.-D. Co., such an argument seems ungracious. But it is made and its origin entitles it to consideration.

NOTE 12—Swift Co. vs. U. S., 111 U. S., 22 (1884);
Lonergan vs. Bufford, 148 U. S., 581 (1893);
Robertson vs. Frank Bros., 132 U. S., 17 (1889);
U. S. vs. Edmonston, 181 U. S., 500;
Maxwell vs. Griswold, 51 U. S., 242, 256 (1850);
McPherson vs. Cox, 86 N. Y., 472;
Vyne vs. Glenn, 41 Mich., 112;
Silsbee vs. Weber, 171 Mass., 378.

NOTE 13—Yick vs. Hopkins, 118 U. S., 356;
Village of Little Chute vs. Van Kamp, 136 Wis., 526;
Brenke vs. Belle Plain, 105 Minn., 84;
Morrill vs. Jones, 106 U. S., 466.

Stated impersonally the proposition is this:

Whereas, the United States has received a valuable gift of property and now takes more from the donor, and before the taking had the arbitrary power to make that which it has taken of no value by withholding from the donor a privilege, the withholding of which would not enrich it, in any particular;

Now Therefore, just compensation is to pay nothing for the property so taken.

Suppose the United States to have granted a timbered forty of public lands and then to have retaken the same to make, with other lands, a public park, and to have entered upon the use of the park and timber. What would we think of the suggestion that "just compensation" did not require payment of anything for the timber on account that the forty granted was entirely surrounded by public lands not granted, and hence the owner of the forty had no means of removing the timber?

The proposition seems subversive of one of the fundamental principles of government,—that of the exercise of the power of eminent domain to facilitate business and make all properties useful by condemning rights of way. The government forces the private right in property to yield to the public interest of access and transportation. In the instant case, our property is being taken to furnish a good passageway for lake transportation; to make ore and wheat of more value by easy access to market. Can it be that this court will aid the government in reducing the value of this property upon such a pretext?

But the fact is that when the deed for land to widen the canal was made, the very inadequate consideration therefor was a perpetual right to transmission of electric current without charge and to side-track facilities and wharfage.

(a) If at the time of taking, the C.-D. Co. had not the right of access it was because it had given to the United States the strip of land about 100 feet wide and about 3,000 feet long lying between the ship canal and its shore lands (R. 6a.) This strip was conveyed to the United States on 22nd of January, 1908. Copy of deed appears in record at pages 352-3-4. The understanding upon which it was made was as above stated, as fully appears in correspondence shown by record on pages 216 to 223 inclusive. Note particularly pages 216-7.

Respecting this contention, the Judge expressed his opinion as appears on page 413-4 of record and adopted this conclusion of law:

> "No understanding between the Chandler-Dunbar Company and the Secretary of War or his subordinates, in connection with the Chandler-Dunbar deed of January, 1908, can operate to destroy public rights or to create vested interest as against the public; but as a basis of fixing the value of property affected by such understanding and now taken, it should be assumed that such understanding will be carried out in good faith by the United States" (Concl. XXI, R. 313) and made finding of fact XXIX (R. 333).

(b) Besides this, proof was made that after the giving of the deed, the C.-D. Co. had abundant space for a side-track on its own land from the railroad to the mill sites on its water power. (Ex. 17, R. 226. R. 220.)

(c) Again, the C.-D. Co. might take the unmanufactured material to the mills in the river and carry away the manufactured product in boats.

III.

JUST COMPENSATION.

Portage Street.

First Assignment of Error.

The findings that the city never accepted the offer of dedication (Rec. p. 316) do not settle the question raised as to Portage Street.

The so called Whelpley Plat of the Village of Sault Ste. Marie was approved Sept. 4, 1855, by the Surveyor General. (R. p. 92.)

The city of Sault Ste. Marie was incorporated by Act No. 533, of Local Acts of Michigan for 1887, p. 766, entitled:

> "An act to incorporate the City of Sault Ste. Marie, and to repeal an act entitled 'An act to re-incorporate the Village of Sault Ste. Marie, approved May twenty-ninth, eighteen hundred and seventy-nine, as amended.' "

Sec. 11 of chapter 28 of said act of incorporation declared the Act to be a public act.

> "Sec. 11. This act shall be deemed a public act, and shall be favorably construed in all courts and places whatsoever. The Legislature may at any time modify, alter, amend or repeal the same."

Local Acts of Michigan for 1887, Act. 533.

Decisions have been heretofore made relative to the parcel called Portage Street and the Whelpley plat of the Village of Sault Ste. Marie.

The Commissioner of the General Land Office decided in 1903 that the fee title to Portage Street so called had passed from the United States to the owners of the adjacent parcels. (Rec. p. 93.)

We make the following excerpt from the decision of the Commissioner in 1903:

> "The 'Whelpley Map,' and the records of this office show that, abutting upon the south side of this portion of Portage Street, the land was laid off into: Lot No. 3, marked 'U. S. Vacant;' a part of claim No. 4, claimed by John P. Richardson, and a part of claim No. 5, claimed by Charles Bacon. The lot No. 3 was sold at public sale, to Thomas R. Easterday, trustee, July 27, 1874, certificate No. 2, and was patented to him May 24th, 1879. The claim

No. 4 was patented to John P. Richardson, April 10, 1882, and the claim No. 5 was patented to Charles Bacon, March 16, 1874. The land abutting upon the north side of that part of Portage Street, and lying between the street and the river, was represented on the 'Whelpley Map' as 'Part of the Indian Reservation.' But that entire tract was located by William Chandler with Porterfield Scrip No. 123, May 17, 1881, and patent issued to him therefor December 15, 1883. Thus all the land on both sides of that part of Portage Street, and abutting upon it, has been disposed of in accordance with the survey, and with relation to the street, and the facts exist which the applicant admits would create a dedication by implication.

"But aside from this, the said act of September 26, 1850, (supra) authorized the survey of the land into 'town lots, streets, avenues, public squares and out-lots,' and, if there is in the language of the act no specific dedication of the streets, I am satisfied that the acceptance and approval of the plat of the survey, and the passing of title to the sub-division as represented upon it, amounted to a dedication of all streets, thereupon laid down, to the public use, and was such an appropriation of the land as would bar the United States from otherwise disposing of it." (Rec. p. 215.) (Rec. pp. 92-93. Finding LII.)

The Gamble case.

10 Dec. Dept. Int., relating to Public Lands, p. 375.

Gamble made application to locate Porterfield Scrip upon about two acres of land designated on Whelpley's map as C. 1 135 and village cemetery. The commissioner rejected his application and appeal was taken to the Secretary of Interior. Among other things the Secretary said,

"1. Did the proceedings under the act of 1850 constitute a dedication of the land in controversy by the United States to the Village of Sault Ste. Marie for public use? 2. If so, did such dedication have the effect to divest the United States of their title to the land?

I am of the opinion that both of these questions must be answered in the affirmative."

Independent of the question of dedication, we submit that when a proprietor of lands, whether the sovereign or an individual, plats lands and gives patents or deeds to lots and refers therein to, and bounds the lots by a street shown in the

plat, the adjoining owners take title to the center of the street, and it is immaterial whether the public have acquired a right of way or not.

Smith v. Lock, 18 Mich. 56 (1869);
Smeberg v. Cunningham, 96 Mich. 378-385 (1893);
White v. Smith, 37 Mich. 291-294 (1877);
In re Albers' Petition, 113 Mich. 640 (1897);
The City of Dubuque v. Maloney, 9 Iowa 450 (1859);
13 Cyc. of Law & Procedure, p. 463.

In Smith v. Lock, supra, a bill was filed to enjoin the defendant perpetually from closing up a certain street fronting complainant's premises. The prayer of the bill was granted. Cooley, C. J., in delivering the opinion of the Court, said, p. 59:

> "Defendants appear to claim that if no street has been regularly laid out or dedicated to the public, in front of complainant's lot, this bill must be dismissed; but this is an error. The purchase of the lot described as bounded on a street, estops the grantor from shutting it up so as to prevent his grantee making use of it for his own accommodation in the enjoyment of his purchase. It is a matter of private right, and in no way depends upon the question whether the public have acquired a right of way or not."

In the case of In re Albers' Petition, supra, the City of Grand Rapids, in proceedings to vacate a street, contended that the property belonged to the City. The Court held to the contrary, and said, p. 641:

> "Our understanding is that the City has no proprietary interest in the land, all of its authority over it growing out of its legal duty to maintain the public ways, which are placed in its charge. City of Detroit v. Railway Co., 76 Mich. 421. Such interest in the land is in the abutting proprietors ordinarily, and is apparently so in this instance, and by the express provision of the statute their rights are recognized. The statute has been applied in many cases, and its constitutionality does not appear to have been questioned."

The case of the City of Dubuque vs. Maloney, supra, has many points of resemblance to the case at bar.

By virtue of acts of Congress, the Government of the United States laid off the town of Dubuque into town lots, streets, avenues, public squares and out-lots, and sold the same.

The defendant became the purchaser of lot No. 73, at the corner of Main and Third Streets, in said city, and received a patent from the United States therefor, in which the lot was described as "in-lot No. 73, of the first class, of the town of Dubuque, containing seventeen hundredths of an acre, according to the official plat of the survey of said town, returned to the General Land Office.

The Court said, p. 455:

> "If the owner of the land lays out a town, and exhibits a plan thereof on which are represented various plats of spare or vacant ground, such as streets, alleys, squares, quays, etc., and the lots are sold with reference to the plan, the purchasers of the lots acquire, as appurtenant to the same, every easement, privilege and advantage which the plan represents as belonging to them. The sale and conveyance imply a grant or covenant to the purchasers that the streets and other public places indicated as such upon the plan, shall be forever open to the use of the public, free from all claim or interference of the proprietor, inconsistent with such use."

And at p. 457-458:

> "It was within the discretion of the Government as the proprietor of the soil, in making sale of the lots, to sell only to the line of the street. But if lots are sold by their number on a plat, and if the lots are bounded by a street or highway, that circumstance raises a strong presumption of an intent to pass the soil to the center of the street or highway and it will so pass accordingly, unless the highway be clearly excluded."

In 13 Cyc. of Law and Procedure, at p. 463, the author says:

> "Deed to Individual Calling for Public Use. According to the great weight of authority, if the owner of land has laid it off into blocks and lots with streets and alleys intersecting it, and sells lots with reference to a map or plat in which the land is so laid off, or where there is a city map in which the land is so laid off, and he sells lots with reference to such map, he will be held to have made an irrevocable dedication of the designed streets and alleys. So far as he is concerned no acceptance is necessary to bind him other than the mere purchase of his lots, which some courts have construed as an acceptance on the part of the public."

The Court found, Rec. p. 343:

"L. The city never, in any manner, did anything indicating an acceptance of that portion of the street north of the canal, although on the south of the canal it improved and occupied the street in the usual manner."

Now even if the improvement and occupation of Portage Street south of the canal was an acceptance of the offer of dedication of the whole street, then the Chandler-Dunbar Water Power Company was entitled to substantial award for the taking.

City of Buffalo v. Pratt, 131 N. Y., 293.

In this case the Court said, p. 300:

"What is there in the law, or in reason, which disentitles him to the receipt of substantial damages? I see nothing and I am averse to holding that the exclusive rights in the land occupied by the street, which he possesses subject only to the public easement, can be taken from him by governmental authority, without just compensation, to be measured by the value of these rights to him. I think that, within the circumstances of the case, the respondents were entitled to be awarded as the compensation provided to be made in the act, upon the taking by the city of the fee of the land in the street in front of their premises, such substantial damages as would be ascertained by measuring the effect upon the value of their property of such a deprivation.

The order appealed from should be affirmed, with costs.

All concur."

Water Power Value.

As said by the Judge, "The chief matter in dispute is the extent and value of the water power rights for which compensation is due." (Opinion R. 406.)

The Judge says: "I fix the annual value of the raw power per theoretical horsepower as follows: For the first 3,000 h. p., $10.00 each; for the second 3,000 h. p., $7.50 each; for all beyond 6,000 h. p., $5.00 each. The cost of development so far made should be added. These values are on the basis of a perfect and unincumbered right to the water." (Find. XIV, R. 328.)

What did he mean by a

Perfect and Unincumbered Right.

Theoretically there could be no "perfect and unincumbered right to the water." There must always be the paramount public right. The Judge must have had in mind, not the theoretical, but the practical side of the question. That he did so is apparent.

First. He fixed no value for water power other than as quoted. Certainly he could not excuse himself from fixing some kind of valuation applicable to the case.

Second. The application of the scale of values to the water planned to be taken into the C. D. Co.'s hydraulic works shows that the term "perfect and unincumbered" was used by the Judge not in a literal or theoretical sense but in a general and business sense,—a sense in which it is applicable to this case.

He says: "I do find that water sufficient to develop 6,500 horsepower (theoretical) on the property of the Chandler-Dunbar Company is surplus water for which compensation should be assessed in this proceeding." (Find. XLI, R. 339.)

And at the same time he says: "The amount seized or impounded by the C.-D. Co.'s existing development is and will be surplus water not needed directly or indirectly for navigation, save by that species of constructive need with reference to which the facts have hereinbefore been found." (XL, R. 338.)

He also says: "Development of power thereby would be subject to some of the special objections and difficulties which have been noted, but to many, and perhaps the majority of such objections, it would not be subject." (Find. XXXIV R., 335.)

From this, it appears that the "perfect and unincumbered right to water" meant to the Judge "Surplus water not needed directly or indirectly for navigation, save by that species of constructive need with reference to which the facts have hereinbefore been found." (XL, R. 338.)

We then inquire what this "Constructive need" means to the Judge. This appears by Find. IX (R. 326), wherein he says: "A large part is clearly not directly necessary at present for the needs of navigation, but such part is so connected with and incidental to the other directly and presently neces-

sary portion as to be affected by and brought within the same pervading necessity and as to make it proper for Congress to take the whole."

From all this we see that the Judge puts the valuation named upon that property taken and fairly classed as "A large part * * * clearly not directly necessary at present for the needs of navigation," * * * (Find. IX, R. 326); and the necessity of taking which "Is constructive as distinguished from an actual necessity;" and is "secondary and incidental to the taking of the primary body now needed." (Find. IX, R. 326.)

Viewed in this light, we cannot see how the Judge could exclude from his award the value of the power (a) of all of the water in excess of the 4,000 c. s. f. possibly necessary for navigation, or (b) that which, evidently, will be used in the M. L. S. P. Co. canal, or (c) that planned to be taken into the hydraulic works under construction by the United States at time of trial.

Second Assignment of Error.

Let us consider just compensation based on findings X. (R. 327), XI. (R. 327), and XX. (R. 330) and on the opinion of the Judge, which was,

> "In the instant case the fact is that if no water was to be used above 4,000 cubic second feet, and no land was to be occupied beyond the amount necessary for locks and appurtenant structures to use that amount of water according to present methods, the remaining water could be made to flow over the remaining land and to develop thereon its full power; but Congress has thought proper to say, in effect, that it will not buy the upland and build the third lock unless it can get the entire associated, and to some extent unitary, property. For the (supposed) 4,000 c. s. f. and for the submerged land necessary for structures for the use of the water there can be no compensation; beyond that, whatever the amount may be, compensation should be paid." (Opin. R. 408.)

Finding X. (R. 327) was, "If no water was to be used beyond 4,000 c. s. f. * * * and no land was to be occupied beyond the amount necessary for locks and appurtenant structures to use that amount of water according to present methods, the remaining water could be made to flow over the re-

maining land and to develop thereon its full power." Finding XI. (R. 327) determines respecting the flow of the river that 64,000 c. s. f. "is the proper measure for this case." Deducting the 4,000 c. s. f., possibly necessary in the remote future for navigation, leaves the surplus flow 60,000 c. s. f. Of this at least one-half or 30,000 c. s. f., is appurtenant to the American shore. The Judge finds that the effective fall on the lands of the Chandler-Dunbar Water Power Company is nine feet (R. 328) and that each cubic second foot flow furnishes one horse power theoretical (R. 328). This gives 30,000 horse power to the riparian. The annual rental value per horse power of the raw, unincumbered, theoretical power is found to be $10 for the first 3,000 horse power, $7.50 for the second 3,000 horse power and $5 for the remainder (R. 328). This gives a rental value of $172,500 per annum for the power of the surplus water.

Capitalize this rental at five per cent and we have a sale, or capitalized, value of $3,450,000. We claim that this is the amount which should have been awarded as just compensation for the water power taken from the Chandler-Dunbar Water Power Company.

In this calculation, against the extreme improbability of any call, in the very remote future, for more than 4,000 c. s. f. for navigation, we set off its probable use for power for generations. Less than one-tenth of 4,000 c. s. f. has been used in any year in the past. We also set off the probability of a large increase of available flow to be produced by remedial works. Such works are desired by both the United States and Canada (R. 332) and are practicable (R. 331). They would undoubtedly largely increase the power.

We also set off the probable, almost certain, future increase in the value of water power. The growing cost of coal and wood, principal present sources of power, and the new methods in electric transmission, both tend to the rapid raise of such value.

What led the trial Judge to award a much less sum? One reason seems to have been the Judge's view of

Burden of Proof.

He said in his opinion:

"In every case, the burden of proof must rest on the subservient owner to show two things: first, that after the

satisfaction of the prior right, there will remain an unincumbered fraction of the whole unit involved; second, that this remainder fraction is substantial and capable of reasonably certain comprehension." (R. 410.)

This rule as stated cannot be a true rule for this case. It cannot be shown

> "that after the satisfaction of the prior right there will remain an unincumbered fraction of the whole unit involved."

This easement of right to use for navigation attaches to every particle of water and every foot of subaqueous land. It is not like a mortgage which can be paid off and discharged, leaving the property unincumbered.

But let us assume a meaning broader than the language of the rule. Let us suppose the meaning of the Judge to have been about this: "Upon the taking of property subject to an easement, the burden of proving the extent to which the value of the property taken is reduced by the easement rests upon the owner from whom the property is taken."

Is this the rule, and if so, is it applicable to this case? Does it not rest upon the United States to show the measure of diminution of value of the riparian estate on account of the dominant easement? The necessity of forecasting the action of Congress and the War Department, and the value of the riparian right in view of such action, has been forced upon the riparian by Congress. The riparian has not sought that the title to his property should be taken. The use alone was necessary to the fullest development of navigation. Such use would have left him in the enjoyment of his riparian rights, subordinate to the easement of navigation. But Congress has forced upon the Court the necessity of determining in advance the measure of a burden which must, in the nature of things, be uncertain. Under such conditions, it seems to us that every reasonable presumption should be in favor of the riparian. It is, in principle, like the case of destruction of evidence. It is an axiom that every presumption is made against the spoliator. Should not, for the same reason, every fair presumption be made against the party forcing determination of an issue necessarily uncertain?

Though there may be no basis for charge of wrong doing, yet the uncertain element having been brought in by the United States, without fault of the riparian, the burden of

making as certain as practicable the necessarily uncertain, so brought in, ought in justice to rest on the United States.

What the United States may determine, hereafter, to do in the interests of navigation would, naturally, be better known to the War Department than to the Ch. D. W. P. Co. Hence it would be appropriate to call on the United States for evidence as to diminution of value on account of existence of its easement. The subject matter being peculiarly within its knowledge, there arises a necessary inference that it has produced all the reliable evidence there is upon the point.

Proof Made.

But if the Judge's view is correct, and the burden is on the servient owner to show the extent of the impairment of the value of the servient estate on account of the dominent easement, it would seem that the servient owner has met this burden when he has shown the probable impairment of value of his estate based on the use of the easement under present methods and to such increased extent as there seems any probability of in the future.

We feel that we have met this condition and borne this burden. We have shown that a flow of 4,000 c. s. f. will carry one thousand million tons of freight past the rapids. This is five times the amount thought necessary by the most enthusiastic navigator and more than ten times the amount heretofore required. (LXII., R. 346.) In view of this proof and the other proofs in the case, the trial Judge found that

> "If no water was to be used beyond 4,000 c. s. f. (that is, a flow of 4,000 cubic feet per second), and no land was to be occupied beyond the amount necessary for locks and appurtenant structures to use that amount of water according to present methods, the remaining water could be made to flow over the remaining land and to develop thereon its full power." (Finding X., R. 327.)

To this finding there was no exception. This seems to meet even the rule laid down by the Judge, that the servient owner must show negatively the extent of the impairment of the value of the servient estate on account of the dominant easement.

If then

> "the remaining water could be made to flow over the remaining land and to develop thereon its full power"

what has the United States shown to further impair the value of the servient estate?

And why should we not have judgment on the basis that "beyond that, whatever the amount may be, compensation should be paid," according to the opinion?

ORBISON'S PLAN.

In his conclusions of law, the Judge says,

> "The burden is upon the riparian owners to show practical and efficient means of developing power for which they ask compensation." (Concl. XXIV, R. 313.)

The C.-D. Co. excepted to this conclusion, but at the same time sought to meet it with proof.

It presented Orbison's plan (Deft's Ex. 21, R. 197).

"This plan projects remedial works." (Ib. id.)

Mr. Orbison says,

> "In making my computations, I have assumed that the high water discharge on the Canadian side was 32% and on the American side 68%. The engineers fixed the amount of flow on the two sides of the International Boundary Line at 35% and 65%. But taking my figures for it, the Chandler-Dunbar Company would, in high water, have to take care of 76,550 second feet * * * * I provided for taking care of 93,280 second feet * * * leaving a leeway of 16,738 second feet." (R. 198.)

Of this plan the Judge finds,

> "All the different plans which have been proposed for development, viz, (a) the first improvement by the Chandler-Dunbar Company, (b) that of the Edison Sault Electric Company adopted and executed about 1901, (c) that of the American Sault Paper Company projected in 1902 but not executed, (d) that of the United States now being executed, and (e) the plan presented by the Chandler-Dunbar Company herein as its basis for computing values, are substantially of the same character and show the adoption of substantially the same method." (Find. LIX, R. 345-6.)

Mr. Ripley's plan was practically the same (R. 193 at foot).

Wallace's plan A was substantially the same (R. 199).

Bogart, introduced by the United States, describes a proper plan, saying,

> "as has been indicated, substantially upon the plans presented by Mr. Orbison." (R. 242, Head.)

ORBISON'S PLAN

Of this plan, the Judge says,

> "The plan for improvement proposed by the Chandler-Dunbar Water Power Company, and the only practicable plan which the record indicates is the building of a dam at approximately right angles with the stream along the lower boundary of the Chandler-Dunbar submerged land, out to the thread of the stream, and then the extension of this dam as a wing dam or dike, upstream, along the international boundary line. Theoretically, this would impound upon the American side of the dike and pass over the dam the same water which would naturally flow over the same submerged land." (R. 333-4.)

None of the eminent engineers on either side, including Col. Townsend of Buffalo in charge of lake navigation, and Mr. Sabin of Sault Ste. Marie, in charge of the Sault, both in employ of, and introduced by, the United States, make any criticism upon this plan. But the Judge criticises the plan upon three grounds.

First he says,

> "The contemplated method of developing the whole power is by dam across the American part of the river and a dike up along the international boundary, and it might be well within the limits of proper discretion for the Government not to permit such a structure.
>
> No reason has been shown, and I see none, why it would not be feasible for such a dam, under private ownership and management, to be fully subject to governmental control and regulation in all matters affecting navigation; but such divided control might cause complications. There is no clear authority therefor, and, in the absence of further legislation, the engineering officers might find room, within the limits of sound discretion and good faith, to refuse such a permit." (Find XXIII, R. 331.)

This puts upon the riparian the burden not only of showing "a practical and efficient means of developing power," but of showing a plan for which there is "clear authority," when confessedly there is as yet no specific authority for any plan, and also of showing a plan which engineering officers might not "within the limits of sound discretion and good faith * * refuse to permit."

Col. Townsend, Prof. Shenehon, Dean of the Engineering Department of the University of Minnesota, and Mr. Sabin and Mr. Bogart and Mr. Porter were present at the instance of the United States. They make no suggestion of unfitness. They were subject to the examination and cross-examination of the Judge who freely used his liberty in that particular.

A suggestion of unfitness might be followed by suggestions for modification obviating the objections.

If the burden was upon us to show "practical and efficient means of developing power" and we showed a plan approved by all the engineers considering the same, and of which the Judge says,

> "No reason has been shown and I see none why it would not be feasible for such a dam, under private ownership and management, to be fully subject to government control and regulation in all matters affecting navigation;" (Find. XXIII, R. 331),

have we not shifted the burden of proof and put upon the United States the burden of showing that

> "the engineering officers might find room within the limits of sound discretion and good faith to refuse such a permit?" (Ib. Id.)

Must we show such a plan that the Court must take judicial notice that "the engineering officers might" not "find room within the limits of sound discretion and good faith to refuse such a permit?"

The difficulty of doing this would approach the difficulty of proving that there is volume of flow "which never will be needed for navigation."

Section 1 of Act of June 21, 1906 (34 Stat. 386) provides

> "That when, hereafter, authority is granted by Congress to any persons to construct and maintain a dam for water power or other purposes across any of the navigable waters of the United States, such dams shall not be built or commenced until the plans and specifications for its construction, together with such drawings of the proposed construction and such map of the proposed location as may be required for a full understanding of the subject, have been submitted to the Secretary of War and Chief of Engineers for their approval, or until they shall have approved such plans and specifications and the location of such dam and accessory works" * * * "Provided,

> That in approving such plans and location such conditions and stipulations may be imposed as the Chief of Engineers and the Secertary of War may deem necessary to protect the present and future interests of the United States."
> * * *

Section 2 provides,

> "That the right is hereby reserved to the United States to construct, maintain, and operate, in connection with any dam built under the provisions of this Act, a suitable lock or locks, or any other structures for navigation purposes, and at all times to control the said dam and the level of the pool caused by said dam to such an extent as may be necessary to provide proper facilities for navigation."

This statute was in force at the time of the enactment of the act for taking, and gives the United States the same control for public purposes over a dam built by the riparian as it has for such purposes over a dam built and owned by itself. Such a dam built by the riparian would leave to the riparian the use for water power purposes of all the flow of the stream excepting that from time to time used for purposes of navigation. Such amount has heretofore been not more than 300 c. s. f. continuous for the year, and so far as human foresight can judge, not more than 4,000 c. s. f. continuous for the year will ever be required for such use.

It seems that by statute as well as common law all dams in public navigable rivers are subject to control of United States in protection of navigation.

The Judge makes further objection to this plan on account that

> "Obviously, the erection of such a structure would practically affect the amount of water flowing on the Canadian side of the dividing wall." (Find. XXXI, R. 334.)
>
> "The converse situation from that suggested in the preceding paragraph may exist," etc. (Find. XXXII, R. 334.)

These objections must apply to any plan which operates to control the flow on the American side of the International Boundary. Such control is just what both the American and Canadian governments wish to bring about. The apprehension expressed in findings XXXI and XXXII (R. 334) have no

basis in fact. The mutual rights and obligations of opposite riparian owners who unite in works to control the flow of the stream for use for power are well settled,—plainly understood, and as we must suppose, will be mutually observed.

For instance, under proper authority, a plan for control of the flow on the Canadian side of the International Boundary Line has been adopted and executed. The riparian on that side has put himself in shape to use his half of the stream when the American riparian has completed work similar in effect on his side. Is it courtesy to the Canadian to now say, respecting an American plan for completing the improvement, that

> "So far as we are informed by this record, the Canadian Government, as sovereign or as a proprietor, might see fit to remove the crest of the rock dam on its side of the dividing wall, or widen and deepen the existing Canadian power canal, and thereby divert to the Canadian side a great part or even all of the water, leaving the Chandler-Dunbar submerged land no longer submerged." (Find. XXXII, R. 334.)

Such a course, persisted in, would mean war.

Suppose A and B, opposite riparians, have, each on his own side, completed improvements for control and use of the power of the stream consisting of a dam and canals. Suppose proceedings to take for public use the land and power of A. What would be thought of a suggestion that it was of no value because, forsooth, B might widen and deepen the canal on his side so as to withdraw all of the water from the stream?

The Judge makes another objection to the Orbison plan on account that

> "The proposed structure, especially in connection with the proposed manufacturing plant built upon piers and covering a great part or all of the submerged land, would be an obstruction to the ice which comes down in the spring in enormous quantities, and would tend to cause an ice jam or blockade, which might send the river over its banks, both in the United States and Canada, and might, for example, destroy the locks." (Find. XXXIII, R. 334.)

No exception appears to this finding, but an exception does appear at request LX (R. 346) to failure to find that the provision in the Orbison plan was sufficient "for any conditions to be reasonably anticipated".

Also the C.-D. Co. requested a finding that

> "The plans proposed by the Chandler-Dunbar Water Power Company for the development and control of the water power sufficiently provide for the passage of ice through the same."

Which finding the Court refused to adopt and the C.-D. Co. excepted (Request 5, R. 350).

As we remember the proofs, there are none respecting the volume of ice passing the Sault Rapids. There is proof of the detention of vessels by the ice in the still water many miles above. But let us suppose that the Judge knew the fact to be as stated, and might take judicial notice thereof.

A glance at the plans shows provision for the passage of ice through a space 120 feet in length, besides two wiers in the back of each flume. Respecting it, Mr. Orbison says,

> "I don't think that the ice conditions there would be materially bad. I don't think that they would be as bad there as, perhaps, in some smaller rivers, after this improvement is made." (R. 198.)

Mr. Ripley, who was for many years in charge of the United States works at the Sault, says respecting ice, "100 c. s. f. would be ample for ice." (R. 195.)

A further glance at the plans shows a dike or wall about 2,000 feet in length running from south end of Canadian cross-dam down stream to the north end of the American cross-dam. We do not need a hydraulic engineer to tell us that this entire dike might easily be made to discharge ice over its top in case of any need therefor.

The line of this dike is not "along" but is "inside" the International Boundary (R. 197, Exhibit 21).

If works were built according to the plan approved by all the hydraulic engineers, witnesses on the trial, whose attention was called to the matter, we should have from the railroad bridge to the cross-dam, not as now, a wild, turbulent stream, but a calm, smooth mill pond, which would itself be frozen over in the winter. The plane of the surface thereof would be practically coincident with the plane of the surface of Lake Superior. Evidently the dike, about 2,000 feet long, might easily be so constructed with spindles or flush-boards, that the entire length thereof could at once be turned into a waste wier for discharge of floating ice.

DESIRE FOR REMEDIAL WORKS.

Canada desired remedial works to the end that the volume of flow appurtenant to the north shore, remaining as surplus after satisfying needs of navigation, might be used for power. Ontario legislated to that end (R. 213-4) and such works have been extended from the north shore to the international boundary. (R. 187, Find. XXXV, R. 336, and general map, Ripley, R. 193.)

Act of Congress approved June 13, 1902, provided that

> "The Michigan-Lake Superior Power Company * * after first obtaining consent of the Secretary of War and the Chief of Engineers * * is hereby authorized to divert water from the St. Mary's River into its water power canal now being constructed at Sault Ste. Marie, Michigan, for water power purposes, while and so long as, such works and diversion of water from said river shall not injuriously affect navigation therein nor impair or diminish the water levels or any natural increase thereof either in Lake Superior * * * conditioned further that said company shall establish, maintain and operate suitable and sufficient remedial and controlling works in the rapids of said river to the approval of the Secretary of War and the Chief of Engineers." (32 Stat. 361.)

Act approved March 2, 1907 (34 Stat. 1100), provided that

> "The Secretary of War may acquire lands for the location of remedial or compensating works to the extent required to enable the Michigan-Lake Superior Power Company to comply with the provisions of the River and Harbor Act of 1902. But such lands, if so acquired, shall be obtained without expense to the United States."

The water power of the down stream eight feet of the Sault Rapids belonged to the United States as private property on account of its riparian ownership (R. 188). Eight feet fall would give seven feet available head. This head with volume of 30,000 c. s. f. would give about 23,000 theoretical horse power.

All this the United States was on June 13, 1902, willing to give to the M. L. S. P. Co. in exchange for construction of remedial works (32 Stat., 361). And on March 2, 1907, the United States was willing to add to this its authority for condemnation of subaqueous lands for a site therefor, conditioned

that it should not be required to pay compensation (34 Stat., 1100). A glance at the maps shows that this site was of necessity the subaqueous lands of the C.-D. Co.

It must be supposed that such remedial works were to be constructed in extension, southward, of the then existing dam built from the north shore to the International Boundary, by the allied interests mentioned in finding XXXV. What then becomes of the criticisms on our plans, such as are expressed in finding XXIII, wherein the Judge says,

> "The contemplated method of developing the whole power is by a dam across the American part of the river and a dike up along the International Boundary, and it might be well within the limits of proper discretion for the Government not to permit such a structure."

What becomes of the legal conclusion that

> "It cannot be assumed that a future Congress will abdicate its right to build, at this point or in this vicinity, suitable works to control the level of Lake Superior, and will accept in the place thereof the right to regulate a privately built, similar structure?" (R. 312-3.)

Does it appear that the M. L. S. P. Co. has a monopoly of congressional favor? Should the heir be displaced by an alien? The C.-D. Co. owned the site for remedial works. Why should the United States forbid it to build such works and give its water power to the M. L. S. P. Co. to induce it to build same?

Another reason seems to have been the Judge's consideration of

Speculative Possibilities.

Of these the Judge himself says,

> "All these examples are highly improbable, probably fantastic." (Find. XXI., R. 330.)

The rule of valuation of property upon condemnation forbids the taking into account of speculative aspects of value. Analogy seems to require that when property is condemned, in case wherein the party taking has an easement, the reduction in value on account of the easement should rest on certainties or strong probabilities and not on speculative aspects

of possible interference with the use of the fee arising out of the exercise of the easement. (Note 14.)

Grand Rapids Booming Co. vs. Jarvis related to contingencies of navigation. Therein Justice Christiancy said,

> "It may be said, generally, and with entire propriety, in answer to this argument, that many difficulties and complications in human affairs may be imagined as theoretically possible, and which, if they should occur, might involve many difficult legal questions as to the relative rights of parties. But it is not always wise or proper for courts judicially to determine such imaginary or purely theoretical questions, until the facts thus imagined or assumed as possible, have actually occurred; especially when there is no authentic evidence that they ever have occurred, and no reasonable probabality that they ever will." (317.)
>
> "The assumed analogy, therefore, if any can be said to exist, is too faint, shadowy and uncertain, to serve as the basis of the right here claimed, and would (in the language of Judge Story) betray us into 'an extravagant looseness which would destroy private rights.' The respective rights of the public to use the stream for the purposes of navigation and the floating of logs, and of the riparian owner to the use of his land, must be harmonized." (318-19.)

In Central Coal & Coke Co. vs. Hartman, Judge Sanborn said, in considering speculative contingencies,

> "Actual damages only may be secured. Those that are speculative, remote, uncertain, may not form the basis of a lawful judgment. * * Facts must be proved, data must be given which form a rational basis for a reasonably correct estimate." (98.)
>
> "In the absence of such proof, the profits he claims remain speculative, remote, uncertain, and incapable of recovery." (99.)

In Atlantic R. Co. vs. Postal Tel. Co., Justice Evans says,

> "The bare suggestion that at some vague time in the

NOTE 14—Grand Rapids Booming Co. vs. Jarvis, 30 Mich., 308;
Central Coal & Coke Co. vs. Hartman, 111 Fed. 96.
Atlantic R. Co. vs. Postal Tel. Co., 120 Ga., 268.

future a railway company may lay additional tracks or build structures for railroad purposes is too remote to authorize a recovery of damages resulting from such possible contingencies." (279.)

Certainly if we take account of possibilities of increase in measuring the burden of navigation, we should also take account of equal possibilities of decrease in measuring the same burden. The trial Judge says,

> "Other methods of using the water in direct aid of navigation may be found, requiring more or all of the water. For example, smoothing out the bed could be made to give an even flow five feet deep, and up a part of such a channel, light-draft vessels could be hauled by the power generated from the water in the remainder of the channel. For further example, the whole power might be employed to operate a ship railway transporting vessels around the rapids; or a floatable product may develop, requiring much of the width of the channel in order properly to be floated down. All these examples are highly improbable,—probably fantastic; but not more so than the present volume of this commerce or the present methods of transmitting this power would have been a few years ago." (R. 330).

In a late address to the Loyal Legion, Chief Justice Winslow of Wisconsin said,

> "The air is the pathway of our thoughts today. It may be the highway of our commerce tomorrow."

Is it not more probable that freight may be lifted or lowered from the level of one lake to that of another by airships than that the river bed shall be ground or hewn to a smooth inclined plane and boats hauled up the incline by water power? If the air becomes the highway of our commerce from lake level to lake level, navigation will not interfere with our water power. Then if the United States should have taken only the use, such use being no longer necessary, the entire fee would remain to us unburdened by the easement.

It doesn't seem to have occurred to the Judge to consider the value of this water power in case Sault Ste. Marie should grow to the size of Constantinople and the entire water power should be required for public service in lighting and local transportation. Doesn't that seem more likely than that the commerce passing the Sault annually shall exceed one thou-

sand million tons? Or that the bed of the river should be planed smooth and vessels hauled up the inclined plane?

The Judge seems to have considered the possible future methods and needs of navigation on the view that the basis on which he fixed his award would establish a limitation upon such future methods and supply, and be prohibitory of other methods and larger supply. In Dorlan vs. East Brandywine, 46 Pa., 520, the Court declined to take proofs of the possible future methods of use of water power to enhance the value.

The Judge says,

> "It is agreed by all that controlling works, consisting of some kind of a dam across the entire St. Mary's River, built and operated through some joint arrangement with Canada, and by which the level of Lake Superior and its outflow could be regulated, would be an extremely desirable thing for both countries, and of great value to the commerce of the upper and lower Lakes.
>
> Such a structure I regard as within the fair limits of possibility in the not very distant future. Its erection, if at some other point, would incidentally destroy the power inchoate at this point, and if the erection was at this point there would be a physical occupation of a greater part or all of the Chandler-Dunbar submerged lands, and the water power produced would be in the nature of an incidental by-produce of the main navigation use." (Find. XXVII and XXVIII, R. 332.)

To the last period of this finding, the C.-D. Co. excepted

> "on account that the erection of the structure therein named by the Chandler-Dunbar Water Power Company would have been practicable and desirable if its property had not been taken, and is practicable and desirable on the part of the United States in the improvement of navigation, and is contemplated by the United States, and the lands of the Chandler-Dunbar Water Power Company offer the most favorable location for the same as appears by the uncontradicted evidence." (R. 333.)

Just what the Judge meant by the statement that "the water power produced would be in the nature of an incidental by-product of the main navigation use" we are at a loss to know.

We do know that the water flowing into Lake Superior must flow out and drop to the level of Lakes Michigan-Huron.

JUST COMPENSATION

LEGAL PROPOSITION

That in this fall there is inchoate power which, by the law of the land, is the property of the C.-D. Co. That this property should not be wrested from it without compensation except for the purpose of navigation. We know that there is no other practicable place for the building of remedial or controlling works to regulate Lake Superior and the St. Mary's River than the Sault Rapids. We know that the economical, legitimate place for building such works, in the interest of navigation, is at about the head of the Sault Rapids in the vicinity of the railroad bridge (R. 226, 234). We know that this is the place adopted by Canadian interests, and the place contemplated as the proper one by the United States.

There remains, then, for consideration, this suggestion. Suppose the United States should incur the very great, unnecessary to aid navigation, expense of building controlling works below the C.-D. Co.'s land so as to drown out the fall thereon and bring the water power appurtenant thereto and parcel thereof to the dam on the United States land below, what effect would this have on the right of the C.-D. Co. to compensation for its power so taken from it?

First. A claim that such method of improvement was adopted in the interests of navigation would appear colorable and not in good faith.

Second. The C.-D. Co. would in that case be entitled to compensation for its water power in use by the United States under the doctrine of Kau. W. P. Co. vs. G. B. & M. C. Co., 142 U. S., 254.

Third. The suggestion has weight in the inverse ratio of the probability of the adoption of such a plan by the United States.

Fourth. If this view of the Court be sound, the United States can take, without compensation, the water power of any navigable river.

A further hindrance to a proper award seems to have been this

Legal Proposition.

> "nor if his" (riparian's) "title fails to part of the channel, has he any right to have the water normally flowing thereover diverted to another part of the channel, the title to which he retains?" (Last clause Conclusion XVI., R. 312.)

LEGAL PROPOSITION

This legal proposition, aided by the facts (a) that the United States may in the future need more of the bed of the river than is now in use for navigation, and (b) that the flow over the part of the bed so used exceeded the 4,000 c. s. f., would show that the value of the riparian's servient estate was further diminished, but to what extent does not appear. But this legal proposition is not sound.

First. It runs counter to the universal rule that water power is appurtenant to the bank and not to the bed of the stream. (Note 15.)

NOTE 15—Diedrich vs. Railroad Company, 42 Wis., 248 (1877);
Fox River Paper Company vs. Kelley, 70 Wis., 287, 294-5, 298 (1887);
Lyons vs. Fishmongers L. R., 10 Ch. 679; Same Case, L. R. 1 App. Cas., 662 (1876);
Canal Appraisers vs. The People, 17 Wend, 571 (1836);
People vs. Tibbits, 19 N. Y., 523;
Brisbine vs. Railway, 23 Minn., 114;
Carli vs. Railway, 28 Minn., 373;
Canal Comrs. vs. Kempshall, 26 Wend., 404-418-9 (1841);
Walker vs. Board of Public Works, 16 Ohio, 540 (1847);
Morrill vs. St. Anthony's Falls, 26 Minn., 222 (1879);
Minnesota vs. Minneapolis Milling Co., 26 Minn., 229 (1879);
United States vs. Ch. D. W. P. Co., 152 Fed. 25 (1907);
United States vs. Ch. D. W. P. Co., 209 U. S. 447 (1908);
G. B. & M. C. Co. vs. Kau. W. P. Co., 70 Wis., 635, 653 (1888);
K.-C. Co. vs. Hewitt, 79 Wis., 334, 337 (1891);
Wilts & Burks vs. Swindon, L. R. 9 Ch. App. Cas. 451 (1874);
Lewis Em. Dom. Sec. 61b, p. 74, Vol. 1;

Second. It runs counter to the rule that the opposite riparians take the use of the flow in halves and not in such proportions as may from point to point run over their subaqueous lands. (Note 16.)

Third. The application of the rule in practice shows that it cannot be sound. The volume of water flowing over one section or strip of subaqueous land is not unlikely to be quite different from the volume flowing over the corresponding strip or section above or below in the stream. The relative depth of water in running streams varies not only at different points in line across the line of flow, but also at different points in the line of flow and also at different points in diagonal lines.

Fourth. How can the United States take, nominally for public use for navigation, and retain without compensation for private use for power? The law abhors waste as nature abhors vacuum. Suppose in the instant case the United States found it useful to take a strip of subaqueous land 100 feet wide, and that over such strip there flowed by nature 10,000 cubic feet a second, and that the United States needs and can use a flow of only 4,000 cubic feet a second for opera-

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Coulson & Forbes, 62-3-4;
Coulson & Forbes, 110-1-2;
Kents Com., 11th Ed., V. 3, *439;
Gould on Waters, Sec. 148;
Farnham on Waters, V. II., Sec. 463, pp. 1568-9, 1570;
Wiel on Waters, Sec. 906.

Contra:

In Re State Res. 16 Abb. N. C. 159;
In Re State Res. 37, Hun. 537.

NOTE 16—Pratt vs. Lamson, 84 Mass., 275;
Dyer vs. Print Works, 22 R. I., 506;
Arthur vs. Case, 1 Paige Ch. 447;
Webb vs. Portland Mfg. Co., 3 Sumn. 189;
Trustee vs. Havens, 11 Ill. 554;
Stolp vs. Hoyt, 44 Ill., 219;
West vs. Fox River Paper Company, 82 Wis., 647, 660;
Warren vs. Westbrook, 86 Me., 32, 39-0-1;
Warren vs. Westbrook, 88 Me., 58;
Angell on Water Courses, 101a.

tion of locks or for any other use for navigation, by the rule laid down, the riparian would have lost his title to the flow of 6,000 c. s. f., which cannot be applied to public use of navigation or any other than private use for power. If the United States uses it for power, must it not pay for it?

Will Not Ever be So Needed.

The Court finds that

> "The amount to be needed for navigation so far as the same can now be definitely determined, must be fixed at this figure (4,000 c. s. f.), leaving the balance beyond need for navigation. I think, however, that owing to all the contingencies involved, it is impossible to fix this amount with sufficient certainty to make any definite finding of fact relating thereto except as in this and in other paragraphs stated." (R. 330.)

And concludes as a matter of law that

> "as applied to this case, the burden is on the private owner to show that the surplus water not now needed for navigation will not ever be so needed." (Conclusion VIII., R. 310-1.)

We showed a very strong probability, a practical certainty, that navigation would never need more than 4,000 c. s. f. The chance of the use of a large part of the 4,000 c. s. f. for power for many years is so great that it outweighs the diminution of value on account of the extremely remote possibility that some day navigation may call for more than 4,000 c. s. f.

If the riparian can have no compensation for water power except such as he can show "will not ever be so needed" for navigation, then the United States may take, without making compensation, all the water power of any navigable river. It needs only to declare the taking of all the river,—banks, bed and flow,—necessary for navigation. In proceedings to fix just compensation, the riparian could only recover for the banks, since it would be impossible for him "to show that the surplus water not now needed for navigation **will not ever be so needed.**"

Did not the Judge overlook the

True Rule

for adjusting compensation in cases of doubt and uncertainty? (Note 17.)

This true rule was stated by Justice Montgomery in Commissioners of Parks vs. Moesta, as follows:

> "The constitutional provision entitling the owner of private property, taken for public use, to just compensation, has uniformly been construed to require full and adequate compensation. The rules to be applied in fixing the compensation are not necessarily the same as obtain in fixing damages in actions upon contracts. The correct rule of compensation in such cases is more nearly analagous to the remedy afforded in an action in tort in which property rights have been interfered with without the owner's assent" (154).

This language is quoted with approval in a dissenting opinion by Mr. Justice Harlan in Backus vs. Fort Street Union Depot, 169 U. S., 557, at 584. The opinion of the majority was not in any way in conflict with the rule stated.

In Sanitary District vs. Railway, Justice Cartwright says:

> "The constitution and the law require that the owner of property shall receive such compensation that he will be as well off after the taking as he was before. To do that it is necessary to determine what the property is worth to the owner, and unless he receives what it is worth to him, he does not receive just compensation." (584.)

The decisions are uniformly to the same effect.

This rule applies with especial force to the case in hand. There are inherent difficulties in determining the value of the riparian's water power on a navigable river on account of the

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NOTE 17—Com'rs of Parks vs. Moesta, 91 Mich., 149, 154;
Bauman vs. Ross, 167 U. S., 548, 582-3;
Bigelow vs. Railroad, 27 Wis., 478, 487;
Grand Rapids Railroad vs. Heisel, 47 Mich., 393, 398;
Chase vs. Portland, 86 Me., 367, 375;
Spring Valley vs. Drinkhouse, 92 Cal. 528, 536;
Met. W. S. E. Ry. vs. Stickney, 150 Ill., 362, 384;
Sanitary District vs. Railway, 216 Ill., 575, 584.

possibilities of future demand for purpose of navigation or other possible public uses. These inherent difficulties have been injected into this case unnecessarily. So far as we can see it was sufficient for the United States to take, from time to time, so much of the flow of the river and so much of the bed of the stream as might be required for the purpose of navigation. If this had been done, few of the difficulties which now present themselves would have been in the case.

Present United States Development.

Third Assignment of Error.

It seems that the United States had at time of trial formed a general plan for the development of the water power at the Sault, and the further improvement of navigation (Find. XXXVI. R. 336); and that the same included the building of controlling works. The Judge found (XXXVI. R. 336),

> "The plans and specifications approved by the War Department and the engineers, forming part of this general project and now in progress of execution, provide for dams, cross and longitudinal, similar to those in existence, but further out into the bed of the stream. By this structure it is the plan and expectation of such department and of such officials to develop water power for sale, pursuant to the provision of this act regarding surplus water."

He further found,

> "The proposed United States structures in the bed of the stream will deliver 7,500 c. s. f. (at stage 601.5) and will produce * * * 7,500 horse power under a 9-foot effective head." (XXXVIII. R. 337.)

The C. D. Co. requested a conclusion of law that

> "Just compensation requires the allowance to the Chandler-Dunbar Water Power Company of the value of the use of the water which the United States has planned to impound by the present works being now constructed in the bed of the river for power purposes. Such allowance not to exceed the value of the use of the same by the Chandler-Dunbar Water Power Company on its submerged lands." (9th Request. R. 305.)

This request was disapproved and the C. D. Co. excepted (R. 305.)

The reason given for this disapproval was that

> "The present United States project for the development of power in the rapids has no evidential force upon the question of what water is beyond need in aid of navigation."

To which conclusion C. D. Co. excepted (Concl. XXX. R. 314).

Respecting this matter, the Judge in his opinion stated,

> "I reject also the present United States project. This will always be under its control. The Government is not inviting or permitting any one else to make an expense. It is itself making the expense, and if it chooses to abandon the plan as an unsuccessful experiment immediately on its initiation, no one can complain." (R. 418.)

Evidently, on completion of these proposed works, the United States will be using water power for pecuniary gain, which the Court found to be of annual rental value of

$10.00 per horse power for first 3,000 h. p., or	$30,000
$7.50 per horse power for second 3,000 h. p., or	22,500
$5.00 per horse power for remainder	7,500
In all	$60,000

Must we not presume, in favor of the riparian, that the United States will avail itself, and be in receipt, of $60,000 per annum on account thereof? The United States chose to take it. The C. D. Co. preferred to retain it. The C. D. Co. practically gave to the United States a large share of its lands between the canal and the river to avoid the taking of its shore land and water power. (See white strip between canal and C. D. Co.'s land on map, R. 6a.)

By the application of what legal principles or rules of justice can we refuse compensation to the riparian for property taken from it, and in use as private property, by the United States for pecuniary gain?

The trial court justifies this refusal on the ground that the impounding and using of this power by the United States has no evidential force upon the question of "what water is beyond need in aid of navigation." (R. 314.) If not, what evidence could be given? This water power is, in part at least, used by the Edison Electric Company for public purposes under a lease from the United States (R. 344-5.) The terms of this lease are peculiarly within the knowledge of the United

States. Presumably a declaration of the terms thereof would not be favorable to its contention.

To say that the expenditure of a large sum of public money to enlarge the water power plant of the C. D. Co. has "no evidential force" upon the question "what is beyond need in aid of navigation" is hardly complimentary to the War Department.

Is not the leasing of water power to a public service corporation for the public purpose of lighting the city as persuasive evidence of equally "evidential force" upon the question what is beyond need in aid of navigation, as a revocable license to enter upon the bed of the river and construct a water power plant?

M. L. S. P. Co. Canal.

Fourth Assignment of Error.

There was at the time of taking, the Michigan-Lake Superior Power Company canal, built avowedly to take and carry for power purposes thirty to thirty-two thousand c. s. f. (Doc. 358, H. R. 56th Cong. 1st Sess. pp. 14, 15, 27-30, Find. XXXV. R. 336.)

Congress had legislated by act of June 13, 1902, that the water of the river might be taken into this canal when its proposed remedial works, started from the Canadian shore, should be completed, conditioned that water levels be properly maintained. (32 Stat. 361). Then, if this canal had the intended capacity, all that was necessary to bring all the half of the flow of the stream into immediate use was the construction of remedial works to be approved by the War Department. The scheme for impounding and using all of this half of the water had been approved in its entirety. Only a small fraction of the work remained to be done. At time of trial, the canal had been built and was in operation, and remedial works had been built from the Canadian shore to the International Boundary line. (R. 187. Find. XXXV. R. 335-6.)

The fact that the M. L. S. P. Co. could not divert this water from the stream without the consent of the C. D. Co. does not affect the question. That was a matter to be dealt with by the two companies, and respecting which the United States had no function to perform. That the United States so looked upon

that matter appears from the following language of the act of June 13, 1902, to-wit,

> "Nothing herein contained shall be held to affect any existing riparian or other rights of any person or corporation, or the existing remedies therefor, or any action at law or equity now pending." (32 Stat. 362.)

This related to contention of C. D. Co. against diversion by M. L. S. P. Co. (R. 181-2-3.)

Congress declared in the act of March 3, 1909 (35 Stat. 822),

> "It is intended that any excess of water in the St. Mary's River at Sault Sainte Marie over and above the amount now or hereafter required for the uses of navigation, shall be leased for power purposes by the Secretary of War upon such terms and conditions as shall be best calculated in his judgment to insure the development thereof. * * * Provided that a just and reasonable compensation shall be paid for the use of all waters or water power now or hereafter owned in said St. Mary's River by the United States, **whether utilized in said river or in any lateral canal,** said compensation to be fixed by the Secretary of War."

On December 12, 1902, pursuant to act of June 13, 1902 (32 Stat. 361), the Secretary of War granted to the M. L. S. P. Co. permission to divert the water of the river into its canal upon acceptance of eleven specified conditions. (R. 370-1-2.) Neither the act of June 13, 1902 (32 Stat. 361), nor this license or permit, put any limit upon the quantity to be diverted except that the amount diverted must be diminished or increased according to the level of Lake Superior.

The easement of the United States to preserve and improve navigation is a public right held in trust for all the people. Congress is not at liberty to substantially impair the easement. In Mobile vs. Eslava (41 U. S. 234), Mr. Justice Catron said,

> "The United States as owner can do no act to obstruct the free public use of the waters more than a private owner of the soil under water could obstruct navigation." (255.)

This doctrine has never since been questioned.

Congress by developing and leasing the water power, of course must not interfere with, or obstruct navigation. If not, then the utilization of the water power to the same extent,

and in the same manner, by the C. D. Co., would not interfere with or obstruct navigation.

The trial Judge found that

> "About 1902, the Michigan-Lake Superior Power Company completed a canal from the waters above the rapids, to slack water below the rapids. This canal was designed to carry 32,000 c. s. f. As constructed, it was capable of carrying that amount or more or less, according to the fall permitted before reaching the power house. It has actually been carrying about 10,000 c. s. f., excepting when this flow has been temporarily diminished or stopped by the United States' engineers when the Lake Superior level reached the determined minimum. Allied interests constructed, upon the Canadian side of the river, compensating works, originally supposed to divert, from the Canadian to the American side, as much water as was to be taken by this Michigan-Lake Superior Power Company canal, but whether such compensating works had such effect is in dispute and is not shown by this record. Both governments have, however, now for a long period of years, permitted 10,000 c. s. f. to be used for developing power through this channel, and it is the plan and expectation of the present officials of the War Department and the present engineering officers in charge of these works, to permit 10,000 c. s. f., or more, of water to pass through this power canal under average conditions, and to receive payment therefor by way of a license or rental as contemplated by the Act of March, 1909, with reference to surplus water." (Find. XXXV. R. 335-6.)

He further found that

> "The permitted and contemplated diversion through the Michigan-Lake Superior Power canal, was, right or wrong, at first supposed not to diminish the flow of water through the rapids on the American side, and the amount of this diversion has been under continuous governmental control, and has frequently been stopped entirely for considerable periods."

To this finding the respondent, C. D. Co., excepted,

> "On account that any supposition that the diversion of water into and through the Michigan-Lake Superior Power canal was 'not to diminish the flow of water through the rapids on the American side' was not enter-

tained after December, 1901, and on account that there is no evidence of any such supposition except" (on the part of) "the Chandler-Dunbar Water Power Company, and no evidence of any such supposition on its part, except the contents of the bill in equity in the action in the Circuit Court of Chippewa County, Michigan," etc. (Find. XXXIX. R. 338, 210-1-2-3.)

This bill shows that although that idea had been entertained by the C. D. Co., it was entertained no longer. (R. 181-2-3.) Reply was verified in October, 1902. (R. 183.)

The C. D. Co. requested a conclusion that

"Just compensation requires the allowance to the Chandler-Dunbar Water Power Company of the value of the use of the water which the United States has planned to divert into the power canal of the Michigan-Lake Superior Power Company, and to lease by the United States for power purposes. Such allowance not to exceed the value of the use of the same by the Chandler-Dunbar Water Power Company on its submerged lands." (R. 304.)

This request was disapproved and the C. D. Co. excepted. (R. 304.)

It also requested a conclusion that

"In addition to the item named in conclusion XX., the Chandler-Dunbar Water Power Company is entitled to the value of the use of the volume of water planned to be used for water power purposes through the Michigan-Lake Superior Power Company's canal, and which such canal has capacity to divert and use, and which amount respondent claims to be 20,000 cubic feet per second." (R. 308.)

This request was disapproved and the C. D. Co. excepted.

The undisputed evidence is that this canal has capacity to carry for use for power with due regard to economy at least 20,000 c. s. f. (R. 197, 232.)

It is evident that on completion of controlling works there will pass through this canal for use for power 20,000 c. s. f., which on the available head on the C. D. Co.'s land would produce 20,000 horse power of annual rental value of five dollars per horse power.

By what process of reasoning can it be claimed that this is not a taking of the property of the C. D. Co.? It has been

taken from the C. D. Co. by the United States that it might be rented for power. Considerable part is now being rented for power. Presumably the United States is in receipt of the rents. But of how much and at what rate, the United States does not choose to disclose.

The ground on which the trial Judge placed his refusal to allow any sum for this taking is his conclusion of law that

> "The fact that the diversion through the Michigan-Lake Superior Power canal was at first supposed not to diminish the flow of water through the rapids on the American side, and the fact that this diversion has been under the control and regulation of the War Department and has been stopped when the War Department thought best, destroy the force of such diversion as evidence upon the question of what water may be beyond need in aid of navigation." (R. 314.)

To this conclusion the C. D. Co. excepted.

The first ground for withholding this water power from consideration is given as the fact that it "was at first supposed not to diminish the flow of water through the rapids on the American side."

What force this fact, if it were a fact, could have upon the question of just compensation we cannot see. What is meant by "at first supposed" we do not know. We do not comprehend how the United States could suppose at any time that it could rent for profit water power appurtenant to the Canadian shore. Again, there is absolutely no proof of any supposition on the part of anyone except the C. D. Co. that taking water through such canal was "not to diminish the flow of water through the rapids on the American side." Such supposition appears to have been held by it at some time in 1895 (R. 181-2-3). But it is very plain that no such supposition existed, either in the minds of representatives of the C. D. Co. or of the United States on or after 1902. (R. 181-2-3, 208, 211.) Certainly Congress had no such supposition in 1902 at time of passage of act of June 13. (32 Stat. 361.)

But what force has any such supposition unless it was entertained by Congress at time of passage of act for taking; and unless Congress supposed that the United States could and would divert Canadian water into this canal and receive rent for it.

The second ground for withholding this water power from consideration is given as

> "That this diversion has been under the control and regulation of the War Department and has been stopped when the War Department thought best."

All uses of waters of navigable streams, except domestic and sanitary, are subject to control of the United States through the War Department for the uses of, and protection of, navigation, both by common law and Federal Statute.

So long as there are no adequate structures to control the outflow of Lake Superior, it is evident that the outflow through this canal may be interrupted by the War Department in aid of navigation in order that the water of Lake Superior may not be lowered. But no such interest will exist when proper controlling works are built and operated, as no doubt they soon will be. The outflow from Lake Superior must continue. The volume will depend on the inflow. That is fixed by the Court for this case at 64,000 c. s. f. When controlling works are built on the American side of the International Boundary to supplement those already built on the Canadian side, all the outflow may easily be made to pass through the water power and navigation canals of Canada and the water power development of the United States and the St. Mary's canal and the M. L. S. P. Co. canal, except a negligible amount to carry logs and ice. (R. 198.) None need be wasted.

Of course, the United States must control the American share. Is it not entirely plain that it will send that part not required for navigation through the M. L. S. P. Co. canal and such other water power plants as are ready to take it and pay rent? Is not that the command of Congress as expressed in the condemnation act?

It may be suggested that the United States has used this water power canal to draw off the water of Lake Superior to fill up Lake Michigan-Huron.

This has happened once (R. 253). This was to compensate for draft of Chicago Drainage Canal (Find. XXIV. R. 331). But the 10,000 c. s. f. so drawn fills Lake Michigan-Huron just as much if it turns water wheels as if it doesn't.

We are unable to see how the fact of such draft affects the value of the use of water through this canal. None of the eminent hydraulic engineers gives any reason why we should

infer diminution of value on this account. Neither does the Judge state a belief that such fact causes any diminution in value.

But if there is such diminution of value, is the United States at liberty to permit the reduction of level of Lake Michigan-Huron by the Chicago Drainage Canal, and draw off Lake Superior, at cost of riparian, to compensate for the reduction?

Is it not a fact, appearing plainly from the evidence and findings herein, viewed on a basis of common sense, discarding speculations classed by the Judge himself as "probably fantastic" (Find. XXI. R. 330), and fears of diversion of stream from its bed by Canada (Find. XXX., XXXI. R. 334), that the United States will avail itself, for pecuniary gain, of 7,500 horse power of water in works now being constructed by it in the bed of the stream, of annual rental value as found of $60,000, and 20,000 horse power through M. L. S. P. Co. canal of an annual rental value as found of $100,000.

Before the taking, whose property was this? What has the United States done to acquire this rental value, except to take it from the riparian. If the United States is immune from paying for it, out of what rule of right does its immunity grow? Ought there not to be some better basis for such immunity than possible, but hitherto unheard of, schemes for improvement of navigation, or fear of violation of international riparian rights by Canada?

On such basis, the United States may take the water power of any navigable river and secure immunity from making just compensation by suggestions of possible uses for navigation conducted on unheard of lines, or possible interference by opposite riparian.

What would be thought of a suggestion, in condemnation of riparian property, of impairment of value on account that an opposite riparian might wrongfully divert a stream and so destroy the power?

Both the United States plan and the M. L. S. P. Co. canal take only 27,500 c. s. f., leaving 2,500 c. s. f. from the American water for navigation. If by possibility more than 4,000 c. s. f. should be required for navigation, Canada and the United States would, of course, divide the burden in excess. Then we

would have ..... 4,000 c. s .f.
Additional American ..... 2,500 c. s. f.
Additional Canadian ..... 2,500 c. s. f.

In all ..... 9,000 c. s. f.

sufficient to carry 2,250 million tons,—more than thirty times the amount which has in any one year passed through the canals,—and more than eleven times the amount "now anticipated as proper to be provided for." (R. 346.)

Basis of Capitalization.

Fifth Assignment of Error.

The Judge determined that the proper basis is ten per cent. He fixed the income of the riparian from water power at $55,000 (R. 339), and required him to get this income from $550,000;—that is, he required the riparian to make his capital earn net ten per cent and guarantee the return of the capital. As well might Pharaoh require the Israelites to make the tale of brick without straw.

The property taken and to be valued is solid real estate not subject to decay. Capitalization should be based on the rental value of such property. We see no reason why it should not be at the lowest interest rate. The Court knows that money can be had in large amounts on unquestionable security, for a long time, at 4%,—that 5% is a high rate of interest on such loans. The history of finance for a hundred years shows that the rate of interest is constantly diminishing. Also that the value of such natural resources as water power is constantly increasing. Also that the means of producing power otherwise are constantly becoming more expensive.

Seven per cent nominated in a bond would stamp it as of doubtful value, and eight per cent would smack of bankruptcy.

Interest imposed by Federal Statutes for the withholding of money from the United States is six per centum. (U. S. R. S., Secs. 963, 964, 965.) In most of the states the rate is the same.

Interest imposed by Michigan statutes for withholding of money is five per centum. (1899, Act 207.) Same in Illinois and Louisiana.

Adjudged cases hold capitalization at four, five and six per cent to be proper under divers conditions. (Note 18.)

Mr. Shorlton says, in his treatise on the Rating of Land Values, London, 1907:

"On the outskirts of any large town may be seen semi-detached houses of about £40 ratable value, built on land worth £800 or £1,000 an acre capital value or, perhaps, £30 an acre annual value. This indicates a rental of three to four per cent of the land value" (pp. 19, 20).

"If capital value is chosen, we could either put a small rate directly on capital value or we could take a percentage—3 or 4%—of capital value, call the result annual value, and put a proportionately higher value on that." (p. 70.)

Respecting a municipal bill, he says,

"The municipal bill boldly provides that the annual value of all land in urban areas * * 'shall be deemed to be an amount equal to 3% of the amount for which the land could be sold as by a willing seller to a willing buyer, or that is, shall be 3% of its capital value" (129, 130).

NOTE 18—Wilcox vs. Gas Company, 212 U. S., 19, 50;
"Six per cent on the fair value of its property devoted to public use." (1908.)
People vs. Tax Comrs., 196 N. Y., 39, 59;
"Six per cent as a fair rate for the purpose of calculating value on a special franchise." (1909.)
Williams vs. Williams, 29 Wis., 517, 526;
"We estimate very liberally * * at six per cent of its value." (1872.)
Philada. Lib. Co. vs. Beaumont, 39 Pa. St., 43, 49;
Six per cent high ground rent. (1861.)
Workman vs. Mifflin, 30 Pa. St., 362, 370;
Same (1858).
Brooke vs. Berry, 2 Gill (Md.), 83 89;
Five per cent "a fair yearly rental for land." (1844.)
Norcross vs. Cambridge, 166 Mass., 508, 512;
Four per cent on value after taking held constitutional (1896).
In re Pigott, 18 Ch. Div., 146, 154;
Four per cent (1881).

Let us reverse the problem. Suppose A to own solid real estate of agreed value of $5,000,000 and B to have an agreement for a perpetual lease at a **fair** rental, lessee paying taxes, and ourselves to be arbitrators to fix the **fair** rental. Could we conscientiously fix it as high as five per cent on the agreed value?

We think that a careful examination of the opinion and findings will show that the Judge fixed the basis of capitalization at ten per cent, partly through inadvertence and partly through the giving of undue prominence to contingencies tending to reduce value, and no force to those tending to increase value.

He finds that

> "There is a present established demand for a comparatively small amount of the raw (unimproved) power. The natural increase from the ordinary growth of the community will not more than counter-balance the loss when the Government construction work ceases. Any further demand must be created by the promotion of power-consuming concerns. The plan for promoting or securing a wood-pulp mill which would consume all the available power, storing, if necessary, its surplus product during the high water, is feasible and is reasonably probable of execution. Such probability is sufficiently definite and certain to justify the conclusion that all the power has a definite value, instead of the conclusion that most of it is too speculative for computation; and I adopt the former conclusion as the fact." (Find. XIV, R. 328.)

He also said,

> "Four or five per cent is too low. The property is real estate, it is true, but not like a farm or a business block; it has value only as a component part of, and as contributing to the business of, manufacturing. In the supposed and most probable instance, its value would be largely dependent on the success of the wood-pulp business, and this would be subject to the contingencies of wood supply, protective tariff, substitution of other paper materials, condition of the market, and many others. Water power itself, within twenty years or ten years, may be in process of being superseded by some new method of power development. For such property, I adopt ten per cent as the proper basis of capitalization." (Opin., R. 410.)

He said, respecting the 6,500 horse power, for value of which award should be made herein,

> "I fix the annual value of the raw power per theoretical horse power as follows: For the first 3,000 h. p., $10.00 each; for the second 3,000 h. p., $7.50 each; for all beyond 6,000 h. p., $5.00 each. The cost of development so far made should be added." (Find. XIV. R. 328.)

Here is division of the entire power into three classes: First class embracing 3,000 horse power of annual rental value of $10 per horse power; second class, embracing 3,000 horse power of annual rental value of $7.50 per horse power; third class, embracing all over 6,000 horse power and of annual rental value of $5 per horse power.

Let us search the above quoted paragraphs for the basis of classification.

As one horse power is essentially the equivalent of any other horse power, we must look for lines of classification in probability of market and nature of use. Evidently the Judge classified on these lines.

He found that

> "There is a present established demand for a comparatively small amount of raw (unimproved) power."

Evidently this "comparatively small amount" means some part, or the whole of, the 6,000 horse power constituting the first and second classes as against the remainder of 24,000 horse power. For the 3,000 horse power constituting the first class and the 3,000 horse power constituting the second class, the Judge evidently thought there is substantially a present use. Evidently referring to the remaining 24,000 horse power, he says,

> "Any further demand must be created by the promotion of power consuming concerns. The plan for promoting or securing a pulp wood mill which would consume all the available power, storing if necessary its surplus product during the high water, is feasible and is reasonably probable of execution."

That is, for 6,000 horse power there is such present and prospective market, and such use, that it is worth,—first class annual rental of $10 per horse power per annum and second class annual rental of $7.50 per horse power per annum, leaving third class, 24,000 horse power of annual rental value of $5 per horse power per annum.

Evidently these rental values had no relation to power to be used in grinding pulp wood. The last three thousand horse power used for that purpose would be of same value as the first. If any of it was worth a rental of $10 per horse power for that purpose, all of it was worth $10 per horse power for that purpose.

The C. D. Co. development which was planned to take in 6,500 c. s. f., furnishing on the head due to C. D. Co. lands, 6,500 horse power, was to produce power for local use, principally in public service. So far as fully developed, the power was practically all applied to that use. (Finds. XXXIV. R. 335, LIII., LIV., LV., LVI., R. 344-5.)

Evidently only five hundred horse power of the 6,500 horse power, for which award was made, was subject to be reduced in value on account of "the success of the pulp wood business." Hence, the Judge's reason for capitalization at ten per cent on account of precarious nature of pulp wood business applies only to $2,500 or 1/22 part of the $55,000, or the annual rental value on which the award is based.

From this it would appear that it was not wise for the C. D. Co. to prove the usefulness of the entire power in manufacturing. Leaving out the $2,500 rental value of 500 horse power to be used for manufacturing, we should have a rental value of $52,500 for the power to be used for public and other local purposes. Capitalizing this $52,500 at five per cent would give us an award of $1,050,000 for only 6,000 horse power.

Having found the rental value of the water power to be $5 per horse power, the Judge depreciates it 50% through capitalization on account of uncertainties in profits of manufacturing on account of "wood supply," "protective tariff," "substitution of other paper materials," "condition of the market," "and many others."

But do all uncertainties tend downward? Do none tend upward? It is well known that various kinds of paper are constantly taking the place of wood in building. Also that water power is constantly increasing in value on account of increasing cost and diminishing supply of fuel and transmission of power by electricity. Also that the "condition of the market" is in the main rising. Who can tell about the "protective tariff?" Free pulp wood, and a tariff on pulp, would aid our pulp mills.

Again. We do not understand how the precarious nature of manufacturing depreciates the value of the annual rental of water power used for that purpose. We can see how the precarious nature of the enterprise wherein it is used may depreciate the rental value of power. But the rental value having been fixed in view of the precarious nature of the enterprise, why should the rental value be further depreciated in capitalization on account of such precarious nature of the business? Here we duplicate the cause of depreciation. Frequently farm crops are comparatively valueless on account of over-production. But the annual rental having been fixed in view of such contingencies, the depreciation in rental value on account thereof must be supposed to have been already merged.

Instead of rating water power rentals as less reliable and valuable than those of "a business block," they should be rated as more reliable. The business block decays. It goes out of fashion. It is subject to depreciation on account of changes of business centers. While the water power is subject to none of these contingencies, but is more like farm lands in steadiness of value. There remains for consideration one further contingency named by the Judge which affects all three classes of power. It is

> "That water power itself within ten years or twenty years may be in process of being superseded by some new method of power development."

Our answer to this is as stated above.

IV.

JUSTIFICATION FOR TAKING.

The act for taking recites that

> "The ownership in fee simple absolute of all the lands and property * * * * is necessary for the purposes of navigation of said waters and the waters connected therewith." (Sec. 11, Act 317, 1909.)

If we take these words literally, the act must be held invalid because,

First. "The ownership in fee simple" is not necessary. Only the use is necessary.

Second. Neither all the flow of the stream nor all the bed of the stream is necessary, as shown by the terms of the act which provide for the leasing of the water for power, to be used in or out of the river.

This river is the property of the riparian, subject to the Federal right to use same for navigation and the State right to navigation, fishing and perhaps for municipal use. The bed and flow of the river are riparian estate subject only to such uses. All of the subaqueous land, and all of the flow, not necessary to such uses may, of right, be used by the riparian. They are private property and cannot be taken except for public uses.

What then shall we say of the validity of the act declaring a taking of the whole of the estate, territory and flow?

It seems to us that if section 11 is to be construed as a declaration, that at the present time the fee simple in all the bed of the St. Mary's River and all the flow of the water over the falls is necessary for present use by the United States for the purposes of navigation under present conditions, the declaration is colorable and the act void. The act itself shows that there is no such present necessity; and that the taking includes the taking of a flow of water to be used for power; and that this power is to be rented for pecuniary gain to the United States. It seems to us that it calls for no discussion or authority to establish that the United States cannot take the water power or subaqueous lands of the riparian to lease the same for power and for mill sites for commercial use and pecuniary gain.

But the act does in terms declare the necessity of the taking of all this property, and declares that a purely private use

shall be made of a large part of it. It seems to us, therefore, that the riparians are, by the act, put to their election to challenge this act of Congress as void on account that it looks to the taking of private property for private use, or to waive that contention, and seek just compensation.

While the rule that private property can be taken under power of eminent domain only for public use is well established, yet as was said by Mr. Justice Holmes in Hudson Water Company vs. McCarter (209 U. S., 349).

> "All rights tend to declare themselves absolute to their logical extreme. Yet all in fact are limited by the neighborhood of principles of policy which are other than those on which the particular right is founded, and which become strong enough to hold their own when a certain point is reached." (366.)

In support of the act, it may be said that the use of parts of this property are now necessary for navigation. The use of other parts may from time to time become necessary. The taking, and the most advantageous use, of a part requires a commingling of the part taken with the part not taken. The operations necessary to the full improvement of the part taken for the public use will necessarily increase the value of the part not needed. Hence may not the United States take the fee to the whole property, making just compensation for the part not necessary to the public use?

The doctrine has long been maintained that when the taking of any interest in private property is necessary for public use, neither the extent of the taking, nor the interest to be taken, is absolutely limited to the amount of property, or interest therein, absolutely necessary for the intended use. It frequently happens that to limit the amount of property, or estate in property, by the exact lines of public use would bring about intricate complications and the expenditure of public moneys upon private property to the enrichment of the owner at the expense of the public. Where the primary object of a taking is a public use, the fact that a private use, not alone justifying the taking, is also served, does not invalidate the taking. (Note 19.)

NOTE 19—To this effect see, as to the estate taken:
Dingley vs. Boston, 100 Mass., 544, 559;
Heyward vs. City of N. Y., 7 N. Y., 314, 325;

In Moore vs. Sanford (151 Mass., 285), Mr. Justice Devens said,

> "The purpose of the act as declared therein, its general structure, the nature of its provisions, its probable operation and effect, are all to be considered in determining whether it is a lawful exercise of legislative power." (288.)

In Dingley vs. Boston, about sixteen acres of city property was rendered too low for drainage by the filling of its drainage basin, the Back Bay, by the city. The city was authorized to condemn the fee of this tract in order that it might fill it and abate the nuisance. The estate absolutely necessary to this public use was the temporary possession of the property with the right to raise the level. If the extent of the taking had been rigidly limited to this use, the public funds would have been expended to enrich the owner of the property. See the reasoning of Chief Justice Chapman therein on pages 558-9.

To the same effect in principle is Spaulding vs. Lowell and other cases cited.

In Green Bay and Mississippi Canal Company vs. Kaukauna Water Power Company, there was a taking of an excess in volume of flow. The same result would have been reached by the same process of reasoning. In order to improve the navigation of the Lower Fox, it was necessary to build dams to maintain navigation pools. Very little water was required for the purposes of navigation. To have held the rigid rule that only that amount of water could be taken which was nec-

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Malone vs. Toledo, 34 Oh. St., 541, 547-8-9;
Rexford vs. Knight, 11 N. Y., 308, 313-4;
Haldeman vs. Railway, 50 Pa. St., 425, 439.

As to the volume of flow taken:

G. B. & M. C. Co. vs. Kau. W. P. C., 70 Wis., 635;
Kau. W. P. Co. vs. G. B. & M. C. Co., 142 U. S,, 254;
Atty. Gen. vs. Eau Claire, 37 Wis., 400, 435.

As to the territory taken:

Moore vs. Sanford, 151 Mass., 285, 290.

Generally:

Spaulding vs. Lowell, 40 Mass., 71, 80;
Rothschild vs. Chicago, 227 Ill., 205;
In re. Southern Wis. Power Co., 140 Wis., 245.

essary to navigation would have brought it about that the State must build the dams and maintain the navigation pools and thus create a water power for the riparian.

Justice Lyon says,

> "It is further maintained on behalf of the defendants that, conceding the Kaukauna water power is within the provisions of section 16 of the act of 1848, such act is invalid as to the surplus of the water power over and above that required for the navigation of the river, for the reason that it is taking private property for private use, which is beyond the power of the legislature. Here, also, we are compelled to differ with the learned counsel for the defendants. It was necessary to erect the Kaukauna dam for the purpose of making the river at that point available for navigation. Without it slack-water navigation would have been impossible" (651).

On review of this decision by this Court, Mr. Justice Brown says,

> "The only question involved in this case proper for us to consider is whether the act * * * * reserving to the State the water power created by the erection of the dam over the Fox River, as construed by the Supreme Court of the State, and the proceedings thereunder, operated to deprive the plaintiffs in error of their property without due process of law." (269.)
>
> "Practically the only question is, whether this act was valid in so far as it authorized the State to take and appropriate the water power in question." (271.)
>
> "The improvement of the navigation of a river is a public purpose and the sequestration or appropriation of land or other property, therefore, for such purpose, is doubtless a proper exercise of the authority of the State under its power of eminent domain. Upon the other hand, it is probably true that it is beyond the competency of the State to appropriate to itself the property of individuals for the sole purpose of creating a water power to be leased for manufacturing purposes. This would be a case of taking the property of one man for the benefit of another, which is not a constitutional exercise of the right of eminent domain. But if, in the erection of a public dam for a recognized public purpose, there is necessarily produced a surplus of water, which may properly be used for manu-

facturing purposes, there is no sound reason why the State may not retain to itself the power of controlling or disposing of such water as an incident of its right to make such improvement. * * * As there is no need of the surplus running to waste, there was nothing objectionable in permitting the State to let out the use of it to private parties, and thus reimburse itself for the expenses of the improvement. * * *

"If the State could condemn this use of the water with the other property of the riparian owner it might raise a revenue from it sufficient to complete the work which might otherwise fail. There was every reason why a water power thus created should belong to the public rather than to the riparian owners." (272-3.)

"So far, however, as * * * water was diverted from its natural course, or from the uses to which the riparian owner would otherwise have been entitled to devote it, such owner is undoubtedly entitled to compensation." (276.)

"Inasmuch as the dam abuts upon this lot, its owner was doubtless entitled to compensation for the land occupied by the dam and embankment, as well as for the value of the use of the water diverted from its natural course." (277.)

"The terms of this act are broad enough to cover not only lands taken for flowage purposes, but all injury done to lands or other property by means of any part of the works of said improvement, which would include damages caused by the diversion of the water." (279.)

In Moore vs. Sanford, there was a taking of excess of territory. Therein Justice Devens said,

"The plaintiffs offer no evidence that the declared purposes of statute, or those fairly to be inferred from it, were not its real purposes. Even if it be true that the Commonwealth, as the result of the enterprise, expects to sell its lands to advantage, many enterprises of great public utility are of advantage to individuals. * * * If lands are taken for a public use and for the benefit of the community, it is not of importance that individuals, or, as in this case, the Commonwealth, may derive incidental advantage therefrom.

> The cases cited by the plaintiffs to the proposition, that, if a private use is combined with a public use in such a way that the two cannot be separated, lands thus taken cannot be said to be taken for a public use, do not affect the case at bar. No land is here taken for a private use, although an incidental and private advantage may arise from such taking for a public use." (290.)

In the instant case the taking is unquestionably far in excess of the needs for present use (a) in the estate taken, (b) the territory taken, (c) volume of flow taken. But in all three particulars, the excess is so connected with what is now necessary to the use that the taking of the whole may, in view of the wide margin of discretion resting in Congress, be technically justified by these decisions, whatever we may think of the wisdom or good faith of the exercise of the discretion.

We may think the declaration of necessity colorable, but so long as it is within the boundary of discretion, it must stand, so far as the taking is concerned, and whatever we may think as a matter of fact, we must assume that the object of the United States in taking the water power was the improvement of navigation; and that hence the act is sustainable on the doctrine of the cases above mentioned.

Must we not, then, difficult as the task may be, undertake to fix the just compensation in view of the relative rights of the riparian and of the United States in the bed of the river and the flow of the stream?

Again, assume that Congress may declare the necessity of taking property for public use, and that its declaration is binding on the courts, so that they will not hear the owner to say, that the declaration is false in fact.

This is an extreme assumption, and obviously leads to the possibility of the taking of property without any real necessity whatever. Does it, however, follow that the declaration becomes binding upon the courts for any other purpose than to allow the property to be taken? This question may be immaterial in all cases where the property to be taken is such that the Government has no right or title in it; for in any event the full value is paid, and the wrong, if any, may be assumed to be sentimental rather than actual, though this, again, is a very broad assumption.

But where the question involves navigable waters the case is different, for before the property is taken, the Government

has rights therein, and the use of the property by its owner is subject to these rights. May not, however, the courts say, —ought they not to say,—we cannot override the will of Congress as to the taking, but upon the question of compensation we will ascertain the truth, and will compel the payment of just compensation for all the property that is not, as a fact, necessary for public use, and this fact we will find as other disputed facts are determined. We will not, on the one hand, interfere with the control of commerce by Congress under the Constitution, nor will we, on the other hand, allow an equally important constitutional provision for just compensation to be rendered nugatory by any specious declaration of necessity. The rights which are given Congress by the Constitution can be exercised, so far as the bed of the stream and the waters thereof are concerned, without any taking whatever. When, therefore, Congress declares the necessity to take, in fee simple, the entire property, the question is simply one of just compensation to be determined upon real necessities as shown by evidence. Any other rule puts such property at the mercy of arbitrary power.

Land Values.

The Judge values the Indian Reservation and part of Private Land Claim No. 3 (Second Description, R. 3) to be used in connection with "30,000 horse power or more" at $100,000. For use as factory site to use the surplus of 6,500 horse power not now used in the city a total value of $40,000 (Find. XLIII. R. 340).

He values claims 95 and 96 (Third Description, R. 3) to be used in connection with 6,500 horse power at $25,000. Same to be used in connection with 30,000 horse power at $50,000. (Find. XLV. R. 341.)

So speculative possibilities have withdrawn from the award nearly four-fifths of the water power and such withdrawal diminishes the value of respondent's upland by $85,000.

Award Claimed.

This respondent, the Chandler-Dunbar Water Power Company, claims an award as of January 1, 1910, as follows:

For water power rights, 3,000 horse power of annual rental value of $10 per horse power	$ 30,000
3,000 horse power of annual rental value of $7.50 per horse power	22,500
24,000 horse power of annual rental value of $5 per horse power	120,000
Total rental value	$172,500
Capitalized at five per cent	$3,450,000
Claims 95 and 96 to be valued as related to a 30,000 horse power development	50,000
Value of (then) existing dike	16,524
Indian Reservation and part of Private Claim No. 3, to be valued as related to 30,000 horse power development, including Portage Street north of canal	100,000
Half interest in bridge property	338
	$3,616,862

To this should be added five per cent per annum from January 1, 1910, date of taking, as part of body of award.

It seems to us that any award by which the water power values above specified might be substantially reduced would permit the taking by the United States, of any water power of a navigable river without compensation.

March 13, 1913.

JOHN H. GOFF,
Respondent's Attorney.

A. B. ELDREDGE,

MOSES HOOPER,

Of Counsel.

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SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1912.

THE UNITED STATES,
PLAINTIFF IN ERROR,

vs. No. 783

THE CHANDLER-DUNBAR WATER POWER COMPANY, ET AL.

THE CHANDLER-DUNBAR WATER POWER COMPANY,
PLAINTIFF IN ERROR,

vs. No. 784

THE UNITED STATES.

REPLY BRIEF OF CHANDLER-DUNBAR WATER POWER COMPANY.

ACT FOR TAKING.

This contention arises out of the taking under section 11 of Chapter 264, of Act of Congress for 1909 (35 Stat. 820-1), which is as follows:

"Sec. 11. That the ownership in fee simple absolute by the United States of all lands and property of every kind and description north of the present St. Mary's Falls Ship Canal throughout its entire length and lying between said ship canal and the international boundary line at Sault Sainte Marie, in the State of Michigan, is necessary for the purposes of navigation of said waters and the waters connected therewith.

The Secretary of War is hereby directed to take proceedings immediately for the acquisition by condemnation or otherwise of all of said lands and property of every kind and description, in fee simple absolute. He shall proceed in such taking by filing in the office of the register of deeds of Chippewa County, in the State of Michigan, a writing, stating the purpose for which the same is taken under the provisions of this section, and giving a full description of all the lands and property of every kind and description thus to be taken. After the filing of said writing, and ten days after publication thereof in one or more newspapers in the city of Sault Sainte Marie, in the State of Michigan, the United States shall be entitled to, and shall take, immediate possession of the property described, and may at once proceed with such public works thereon as have been authorized by Congress for the uses of navigation.

The circuit court of the United States for the western district of Michigan is hereby given exclusive jurisdiction to hear condemnation proceedings and to determine what compensation shall be awarded for property taken under authority of this section. After the taking of any property by the Government of the United States, as herein provided for, the United States, by its proper officials, shall begin condemnation proceedings in the aforesaid court, and the practice shall be in accordance with the practice in the courts of the State of Michigan for the condemnation of lands by the State for public buildings of such State so far as the same may be followed without conflicting with the provisions hereof. Possession may be taken by the United States prior to a determination by a court of any necessity of taking, and prior to any determination of the amount of compensation.

Any money payable by the Government under the provisions of this section shall be payable out of any money heretofore authorized or appropriated for the purpose of improving Saint Mary's River at the falls, Michigan.

All that part of "An Act making appropriations for the construction, repair, and preservation of certain public works on rivers and harbors, and for other purposes," approved March second, nineteen hundred and seven, beginning with the words "and all lands and waters north of the present St. Mary's Falls Ship Canal throughout its length," and ending with the words "to comply with the provisions of the river and harbor Act of nineteen hundred and two, but such lands,

if so acquired, shall be obtained without expense to the United States," is hereby repealed.

Every permit, license, or authority of every kind, nature, and description heretofore issued or granted by the United States, or any official thereof, to the Chandler-Dunbar Water Power Company, the Edison Sault Light and Power Company, the Editon Sault Electric Company, or the St. Mary's Power Company, shall cease and determine and become null and void on January first, nineteen hundred and eleven, and the Secretary of War is hereby authorized and instructed to revoke, cancel, and annul every such permit, license, or authority, to take effect on January first, nineteen hundred and eleven.

The Secretary of War may, in his discretion, permit the Chandler-Dunbar Water Power Company and the Edison Sault Electric Company to maintain their present works and utilize the water power in said river at said rapids, in so far as the same does not interfere with navigation, or retard the construction of government works in said river, under such rules or regulations as have been or hereafter shall be imposed by the Secretary of War, until they shall be paid the compensation awarded by the court for their property condemned under the provisions of this section; but said permit shall not extend beyond January first, nineteen hundred and eleven.

The President of the United States is respectfully requested to open negotiations with the Government of Great Britain for the purpose of effectually providing, by suitable treaty with said Government, for maintaining ample water levels for the uses of navigation in the Great Lakes and the waters connected therewith, by the construction of such controlling and remedial works in the connecting rivers and channels of such lakes as may be agreed upon by the said governments under the provisions of said treaty.

The Secretary of War is further authorized and instructed to cause to be made a preliminary examination and survey to ascertain and determine the proper plan and the probable expense for constructing in the rapids of the Saint Mary's River a filling basin or forebay, from which the ship locks shall be filled: Provided, That such survey shall in no way delay or interfere with the plans for construction already under way."

Award for Upland.

Counsel say,

> "The court erred in awarding to the respondent, Chandler-Dunbar Water Power Company, on account of the said first description, the sum of ten thousand ($10,000) dollars by reason of its desirability for lock and canal purposes, and the sum of five thousand ($5,000) dollars in connection with the land along the rapids if used as a part of the development of 6,500 horsepower." (B. 36.)

The award for the upland was fully justified.

The certificate to the Bill of Exceptions (R. 401-2) shows that it cannot reasonably be claimed that the Bill of Exceptions contains all the evidence relating to the value of the upland.

The Court awarded to the C. D. Co. as follows:

"For the upland, excepting claims 95 and 96, $65,000 less seven per cent on account of Portage Street sub-parcel $60,450
Claims 95 and 96 25,000
Half interest in sub-parcel on bridge property ..... 338"
(R. 158, 317.)

The finding relative to the upland excepting claims 95 and 96 appears in the Record at page 340, Finding XLIII., and the finding relative to claims 95 and 96 appears in the Record at page 341, Finding XLIV.

It is apparent from the testimony that no "necessity value" was awarded by the Court.

Joseph Ripley, who was at the Sault as Assistant Engineer and General Superintendent of the locks from 1898 to 1906, and who based his opinion on prices paid for lands on the north side of Water Street and below the locks, placed the value of the Chandler-Dunbar Water Power Co. lands, including Portage Avenue for canal purposes, at about a half a million dollars. (Rec. p. 196.)

Mr. Shenehon, a government witness, estimated the whole of the Chandler-Dunbar Water Power Co. property to be worth somewhere between a half a million and a million dollars. (Rec. p. 253.)

The testimony of John G. Stradley showed that outside of the immediate vicinity of the Sault, one would have to go north

or south about 300 miles from the Soo for the purpose of a bridge crossing. (Rec. p. 186.)

The finding of the Court regarding claims 95 and 96 (Rec. p. 341) was that the wharf structures and filling located thereon and extending therefrom cost approximately $12,000.00.

The filled strip was about 250 feet wide and a thousand feet long or more. (Rec. p. 263.)

We infer from the record, pp. 340-1-2, that the objection to these awards for upland is that the location or quality of land taken, on account of which it is especially valuable for public use, cannot be considered by the Court in fixing just compensation.

Well considered cases hold contrary to the contention of the Government.

Young vs. Harrison, 17 Ga. 30 (1855);
Boom Co. vs. Patterson, 98 U. S. 403, 407-8 (1878);
Goodin vs. C. & W. Canal Co., 18 Ohio Sta. 169 (1868).

In Young vs. Harrison, Judge Starnes, delivering the opinion of the Court, said:

> "Let us look at the question from this point of view, and we will readily see that the land owner in this case cannot get compensation for the deprivation of this particular piece of ground, unless he receives, in the first place, what it was worth, to him, as a bridge site, or its equivalent, at the time of such deprivation. But to determine what it was worth to him, we must look to the circumstances of the case. If he owned the land for half a mile on one side of the bridge and for a greater distance on the other, and if, consequently, there was no eligible site upon the land of any other person opposite to the town of Eufaula (and these facts are stated in the testimony) then, upon the simple principle that supply and demand regulate the price of any given article, a bridge site upon his land was worth more than if the supply had been greater, and there had been other localities upon the lands of other persons which might have been procured for this purpose. The land on which this bridge rests, in such a case, would be worth more, of course, than its value for agricultural purposes. It would have a particular value in the market, as a site for one of the abutments of a toll-bridge—a value to be regulated according to the extent of the demand." (36-7.)

In Boom Company vs. Patterson, Mr. Justice Field, delivering the opinion of the Court, said,

> "The views we have expressed as to the justness of considering the peculiar fitness of the lands for particular purposes as an element in estimating their value, find support in the several cases cited by counsel." (409).
>
> "And in Young v. Harrison (17 Ga. 30), where land necessary for an abutment of a bridge was appropriated, the Supreme Court of Georgia held that its value was not to be restricted to its agricultural or productive capacities, but that inquiry might be made as to all purposes to which it could be applied, having reference to existing and prospective wants of the community. Its value as a bridge site was, therefore, allowed in the estimate of compensation to be awarded to the owner." (410.)

In Goodin vs. Canal Company, the question was as to just compensation for a canal bed, which was no longer useful as a canal bed, but which was taken for a railroad right of way. Judge Welch, delivering the opinion of the Court, said,

> "True, the evidence shows that the property was of little value as a canal. As such, in the language of defendants' witnesses, it was 'played out.' It seems to have been as such that it was appraised, upon the interlocutory order of sale, and as such it must have been valued by the two boards of directors at the time of its sale or **pro forma** condemnation. This was no fair method of estimating the value of the property. The true value of anything is what it is worth when applied to its natural and legitimate uses—its best and most valuable uses. The estimate should have been of its value generally, for any and all uses, and not for any particular, and especially not for any inferior or inappropriate, use. It is in vain to say that the property is worth little to the canal company, because they have no power, as such, to convert it into a railroad. * * * The railroad company should pay **somebody** for this property. She refuses to pay the original owners for it, because, she says, the canal company, by transferring it to her, prevented its relapse to such original owners; and she refuses to pay the canal company anything more than a nominal price for it, because, she says, **if** the canal company had **not** transferred it to her, it **would** have relapsed; and as the result of this logic, she gets the property for a merely nominal price." (181-182.)

Interest.

Counsel for United States say,

> "As a general rule the United States does not pay interest on any debts of the Government." (B. 45.)

This is true but not applicable. No interest was allowed herein as such. The fact was that the land was taken on January 1, 1910. No use thereof could be made thereafter by the former owner. Therefore allowance of a sum for deprivation of use between the date of taking and the date of award seems appropriate as a part of the body of the award, and not as interest. Such was the opinion of the trial court. The award, clause 5½, specifies,

> "In addition to and as a part of the respective awards heretofore made, simple interest at five per cent per annum from and after January 1st, 1910, shall be computed and paid upon each of such awards until the time of payment, excepting, however, five hundred sixty-six thousand five hundred and twenty-four ($566,524.00) dollars of the award to the Chandler-Dunbar Company on account of description number two, as to which excepted sum interest shall accrue only from the date when the accruing of rentals to the Chandler-Dunbar Company for water power shall cease." (R. 159.)

Want of Access.

Counsel for the United States say,

> "The said premises to which said 6,500 theoretical horse power is physically appurtenant is abutted by Government lands on all sides except facing the river, and the said company has no way of necessity across the said Government lands and without such way, said lands are without value for power development by any private shore owner." (B. 41.)

In addition to what is said on this point in our brief (39, 40, 41), we further refer to Finding XXIX. that

> "Claims 95 and 96 give full access to deep water navigation on Lake Superior."

Certainly there would also be full access by water from said claims to any mills on C. D. Co.'s subaqueous lands or any of its shore lands herein taken.

FEDERAL CLAIM TO WATER POWER.

That part of the entire brief in behalf of the United States relating to water power rests upon the proposition that the right of the United States in the waters of navigable rivers is, not simply a right to use in aid of navigation under the commerce clause of the constitution, but in some way or sense a property right—**jus privatum** as distinguished from **jus publicum.**

Counsel say,

> "The navigable waters and their beds are the public property of the United States and subject to all the requisite legislation of Congress." (B. 19.)

This idea may be gathered from many other passages of the brief, but is nowhere else so distinctly stated.

Respecting the River Bed.

The "bed" of the St. Mary's River, herein taken, was adjudged, by this Court, in United States vs. Chandler-Dunbar Water Power Company (209 U. S. 447), to be the private property of the C. D. Co. Therein Mr. Justice Holmes said,

> "The bed of the river could not be conveyed by the patent of the United States alone, but, if such is the law of the State, the bed will pass to the patentee by the help of that law, unless there is some special reason to the contrary to be found in cases like Illinois Central Railroad Co. v. Illinois, 146 U. S. 387. This view is well established. * * * Therefore, if by the law of Michigan the bed of the river or strait would pass to a grantee of the upland, we may assume that it passed to the defendant, and we may assume further that the islands also passed. * *
>
> But whatever may be the law as to lands under the great lakes, People vs. Silberwood, 110 Michigan, 103, we believe that the law still is as it was declared to be in Grand Rapids & Indiana R. R. Co. v. Butler, 159 U. S. 87, 94, that 'a grant of land bounded by a stream, whether navigable in fact or not, carries with it the bed of the stream to the center of the thread thereof,' and that this applies to the Sault Ste. Marie, whatever it be called. The fact that it is a boundary has not been held to make a difference. The riparian proprietors upon it own to the center." (451-2-3.)

Respecting the Flow and Power.

Herein the Court found that

"(a) The largest volume of freight which has passed through the American and Canadian Canals in any one year was 62,000,000 tons, in the year 1910.

(b) The largest volume of freight now anticipated as proper to be provided for is 200,000,000 tons per year.

(c) The volume of flow of 4,000 c. s. f. would provide for the passage of 1,000,000,000 tons of freight per annum, according to present methods, and for all forest products now passing." (LXII. R. 346.)

"For the years 1907-8-9, the average flow was slightly above 64,000 c. s. f., and this is the proper measure for this case." (XI. R. 327.)

From this it is apparent that there is and so far as we can anticipate, always will be, flowing over riparian's subaqueous land, a vast volume of water in the St. Mary's River, appurtenant to the American shore, not usable for navigation according to present methods. Whose property is this? Do counsel claim that it is property of the United States, as would seem from statement quoted?

To the contrary, there are the authorities cited in our brief, and in addition thereto a solemn contract of the United States entered into with the utmost deliberation and upon the most meritorious and patriotic consideration.

Whatever may be the rule in other states, the riparian is the owner of the water power in those states carved out of the territory northwest of the Ohio and east of the Mississippi.

At an early day Virginia claimed to be the owner, both as sovereign and proprietor, of the territory northwest of the Ohio, comprising the now States of Ohio, Indiana, Illinois, Michigan, Wisconsin, and the eastern part of Minnesota.

On December 15, 1778, the House of Delegates of Maryland instructed her delegates in the Congress not to ratify the Articles of Confederation unless same should contain some provision for participation by all the States in the "western country" "wrested from the common enemy by the blood and treasure of the thirteen States." The instructions were laid

before Congress May 21, 1779. On September 10, 1779, Congress took these instructions into consideration and resolved,

> "That it be earnestly recommended to those States who have claims to the western country to pass such laws and give their delegates in Congress such powers as may effectually remove the one obstacle to a final ratification of the Articles of Confederation; and that the legislature of Maryland be earnestly requested to authorize the delegates in Congress to subscribe the said Articles."

On March 7, 1780, New York presented to Congress an act for cession of its claims in the western territory to the United States.

On October 10, 1780, Congress resolved,

> "That the unappropriated lands that may be ceded or relinquished to the United States by any particular State * * shall be disposed of for the common benefit of the United States and be settled and formed into distinct republican states which shall become members of the Federal Union and have the same rights of sovereignty, freedom and independence as the other states."

On March 1, 1781, New York carried into effect the act of March 7, 1780, by making cession of its western territory according to the provisions of the act, to the effect that the territory

> "either with respect to the jurisdiction as well as the right of pre-emption of soil or the right of pre-emption of soil only, shall be and inure for the use and benefit of such of the United States as shall become members of the Federal Alliance of the said states and for no other use or purpose whatever."

On the same day, Maryland ratified the Articles of Confederation, thus completing the union.

(Public Domain with Statistics, pages 57-64).

The State of Virginia, by act January 2, 1781, submitted a proposition for the cession of her western lands. This proposition was by act of Congress, September 13, 1783, accepted. Virginia, by act October 20, 1783, authorized her delegates in Congress to make a deed of cession. On March 1, 1784, the Virginia delegates tendered a deed of cession of lands including the present State of Michigan, which was accepted.

This deed purported to

> "convey, transfer, assign, and make over, unto the United States in Congress assembled, for the benefit of the said States, all right, title, and claim, as well of soil as jurisdiction, which this Commonwealth hath to the territory or tract of country within the limits of the Virginia charter, situate, lying and being, to the northwest of the river Ohio * * * upon condition that the territory so ceded shall be laid out and formed into States * * * having the same rights of sovereignty, freedom and independence as the other States * * *
>
> That all the lands within the territory so ceded to the United States * * * shall be considered as a common fund for the use and benefit of such of the United States as have become or shall become members of the Confederation or federal alliance of the said States, Virginia inclusive, according to their usual respective proportions in the general charge and expenditure, and shall be faithfully and bona fide disposed of for that purpose, and for no other use or purpose whatsoever." (Ib. 68-9-0).

Later there was some slight modification of the grant ratifying the Ordinance of July 13, 1787, for the government of the territory northwest of the Ohio.

Before the cession of the western lands, to the United States, by the different states of the original thirteen, Massachusetts claimed to own that part of Michigan lying south of a line running due east and west about on the latitude of Bay City. (Hinsdale's Old Northwest, 200-1.)

On April 19, 1785, Massachusetts ceded her western lands to the United States. The deed of cession recited that Massachusetts did

> "by these presents, assign, transfer, quit-claim, cede, and convey, to the United States of America, for their benefit, Massachusetts inclusive, all right, title, and estate of and in, as well the soil as the jurisdiction, which the said Commonwealth hath to the territory or tract of country * * * to the uses in a resolve of Congress, of the tenth day of October, one thousand seven hundred and eighty, mentioned." (Fed. Laws, B & D.'s Ed. v. 1, p. 482.)

By act approved Aug. 4, 1790, the United States assumed the war debts of the various states (1 Stat., 142), and by the same act provided

> "That the proceeds of the sales which shall be made of lands in the western territory, now belonging, or that may hereafter belong, to the United States, shall be, and are hereby appropriated towards sinking or discharging the debts, for the payment whereof the United States now are, or by virtue of this act may be, holden, and shall be applied solely to that use until the said debts shall be fully satisfied."

The soil and property was taken by the United States in trust to apply the proceeds to payment of this public debt, and the sovereignty in trust to confer same upon new States to be formed and admitted into the Union.

To secure the fulfillment of this trust and prevent interference therewith by the new States, the Ordinance of 1787, being articles of compact between the original States and the people and States in the said "territory northwest of the Ohio," was adopted. The same provided that

> "The legislature of those districts or new States, shall never interfere with the primary disposal of the soil by the United States in Congress assembled, nor with any regulations Congress may find necessary for securing the title in such soil to the bona fide purchasers." (Compact, Art. 4.)

The States of Ohio (2 Stat., 174, sec. 5), Indiana (3 Stat., 290, sec. 4), Illinois (3 Stat., 430, sec. 4), Michigan (5 stat., 50, sec. 4), and Wisconsin, (9 Stat. 56, Sec. 7) were admitted into the Union on promise to comply with such ordinance.

By act approved June 23, 1836 (1 Stat., 59), Congress proposed to Michigan as one of the conditions of its admission into the Union that Michigan

> "shall provide by an ordinance, irrevocable without the consent of the United States, that the said State shall never interfere with the primary disposal of the soil within the same by the United States, nor with any regulations Congress may find necessary for securing the title in such soil to the bona fide purchasers thereof."

July 25, 1836, Michigan adopted such ordinance.

The salient point is that the States to be formed out of the Northwest Territory shall be admitted into the Union "having the same rights of sovereignty, freedom and independence as the other States" or "the original States" on the one side, and on the other side, "That all the lands * * * shall be considered as a common fund for the use and benefit of such of the United States as have become, or shall become, members of the Confederation or Federal Alliance of the said States, Virginia inclusive, according to their usual respective proportions in the general charge and expenditure, and shall be faithfully and bona fide disposed of for that purpose, and for no other use or purpose whatsoever."

To protect itself against State action in hostility to the execution of this trust, the United States required the assurance that Michigan would "never interfere with the primary disposal of the soil." This indicates the importance of the trust in view of the United States.

This bargain between Virginia and the United States must be construed in view of the then conditions, and the then views, respecting sovereignty on the one side, and soil property, on the other side. If the right to use the flow and fall of a non-tidal, public river was then, according to common understanding, property—if the courts would then have held it to be property—parcel of the riparian estate, then the United States never owned it, or any interest in it, except in trust to apply the proceeds thereof

> "towards sinking or discharging the debts for the payment whereof the United States now are or by virtue of this act may be holden, and shall be applied wholly to that use until the said debts shall be fully satisfied as per act of Congress approved August 4, 1790 (1 Stat. 142) and thereafter in trust as a common fund for the use and benefit of such of the United States as have become or shall become members of the Confederation or Federal Alliance of said states, Virginia inclusive, according to their usual respective proportions in the general charge and expenditure, and shall be faithfully and bona fide disposed of for that purpose and for no other use or purpose whatsoever"

as per Virginia deed of cession. (Public Domain with Statistics, pages 68-9-0.)

In neither case was anything left to the United States free from this trust except such interest in public rivers as was devolved upon it by the commerce clause of the Constitution.

From these incidents, (the Federal resolve of Oct. 10, 1780, deed of cession of April 19, 1785, and Federal act of Aug. 4, 1790) it appears that the United States took the interest of Massachusetts in the territory, now State, of Michigan, whatever the same may have been, under the same trust, and for the same uses and purposes, as the interest of Virginia in the same was taken.

Substantially the same may be said of any shadowy claim New York may have had. (Fed. Stat. 1, B. & D.'s Ed., 467.)

Soil, or Jurisdiction.

Legislative Construction.

Federal legislation, substantially contemporary with these cessions, shows that water power was then understood to be private property, and not sovereign property.

The land ordinance of 1785 says the surveyor should note

> "at their proper distances all mines, salt springs, salt licks, and mill seats that shall come to his knowledge."

(Fed. Stat., B. & D.'s Ed., v. 1, p. 563.)

By act May 18, 1796, Ch. 29, Sec. 2 (1 Stat., 466), it is provided

> "Every surveyor shall note in his field book the true situation of all mines, salt licks, salt springs and mill seats which shall come to his knowledge."

These notations were, no doubt, required in order that the Land Office might locate such tracts as Congress might reserve on account of mines, salt springs, and mill seats. Mill seat includes water power. (Words and Phrases, v. 5, p. 4507).

Many tracts of considerable extent were reserved on account of salt springs "for the future disposal of the United States." (1 Stat., 466), (2 Stat., 279, 394, 664, 684, 728), (3 Stat., 332).

Some tracts were reserved on account of lead mines. (2 Stat., 329, 449, 621, 665).

None, so far as we know, were reserved on account of mill seats.

But Act May 10, 1800, Ch. 55, Sec. 16 (2 Stat., 78) enacts

> "That each person who, before the passing of this act, shall have erected, or begun to erect, a grist-mill or saw-mill upon any of the lands herein directed to be sold, shall be entitled to the pre-emption of the section including such mill, at the rate of two dollars per acre."

Judicial Construction.

The ownership of, and jurisdiction over certain lands in the southwestern part of New York were, in an early day, subject of contention between Massachusetts and New York. This contention was adjusted between these States in 1786 by treaty. Thereby New York ceded to Massachusetts right of pre-emption of soil from the Indians, and all estate, right, title and property (the right of government, sovereignty and jurisdiction excepted); and Massachusetts ceded to New York all claim to the government, sovereignty and jurisdiction.

Later, contention arose between the State of New York, on the one side, and a riparian claiming water power under grant of Massachusetts, on the other side.

Later another contention arose between the city of Rochester, acting under authority of New York, for public purposes, on one side, and a riparian claiming water power, under grant of Massachusetts, on the other side.

In both cases, it was held that under the treaty the water power passed to Massachusetts as soil or property, and not to New York as the right and title of government, sovereignty and jurisdiction. (Note 1.)

On the question of the classification of water power as "soil" or "jurisdiction" (Massachusetts Cession) or "land" or "sovereignty" (Virginia Cession), how can we differentiate between the water powers of navigable or public, and non-navigable or private, streams? If the water power of a non-navigable or private stream is parcel of the "soil" or "land" as distinguished from "jurisdiction" or "sovereignty", why does the classification change when the terms are applied to a navigable or public stream? True the public right of navigation is parcel of "jurisdiction" or "sovereignty". But how does this fact draw away from the "soil" or "land" to "jurisdiction" or "sovereignty" the water power? If water power is by its nature parcel of "jurisdiction" or "sovereignty" where is the distinction between the ownership or classification of water power of private streams and public streams?

The water powers passed by the cessions to the United States as property,—as "soil" and "land" and not as "juris-

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NOTE 1 — Commissioners vs. Kempshall, 26 Wend., 404, 420 (1841);
Smith vs. Rochester, 92 N. Y., 463, 476 (1883).

diction'' or ''sovereignty'' under the sacred trust to sell same and devote the proceeds to payment of the war debt of the Revolution.

An unbroken line of Michigan decisions proceeds on the basis that the water powers of public navigable rivers is the property of the riparian. (Note 2.)

Wisconsin decisions are uniform and to same purport. (Note 3.)

Summary.

The United States is now in possession, as property, and for its pecuniary gain, of 7,500 horse power of water in present United States plant of annual rental of

For first 3,000 horse power at $10 per h. p. $30,000
For second 3,000 horse power at $7.50 per h. p. 22,500

This rental is for other than general manufacturing purposes. Hence it ought, assuredly, to be capitalized at 5%.

NOTE 2 — Middleton vs. Boombing Co., 27 Mich. 533;
Ice Co. vs. Excelsior, 44 Mich. 229;
Buchanan vs. Grand River & G. L. R. Co., 48 Mich. 364;
Wooden vs. Wentworth, 57 Mich. 278;
Koopman vs. Blodgett, 70 Mich. 610.

NOTE 3 — G. B. & M. Co. vs. Kau. W. P. Co., 70 Wis., 635 (1888)
Koenig vs. Watertown, 104 Wis., 409 (1899);
Kimberly & Clark Co. vs. Hewitt, 79 Wis., 334 (1891);
West vs. Fox River Paper Co., 82 Wis., 647 (1892);
Fox River F. & P. Co. vs. Kelly, 70 Wis., 287 (1888);
Kaukauna W. P. Co. vs. G. B. & M. Canal Co., 75 Wis., 385 (1890);
Conn. vs. Little Suamico, 74 Wis., 652 (1889);
Wis. R. Imp. Co. vs. Pier, 137 Wis., 325 (1908);
State vs. Bancroft, 148 Wis., 124 (1912).

Award for this should be $1,050,000

The remaining 1,500 horse power in United States plant is of rental value of $5 per horse power, equal to $7,500. Capitalized at 5%, as claimed by us, this should add 150,000

In all for water power now held for use in United States plant $1,200,000

Besides this is 22,500 horse power not necessary for navigation. A large part of this (10,000 h. p. or more) is now being used through the M. L. S. P. Co. Canal under lease from the United States. This, at $5 per horse power, capitalized at 5%, gives additional award of 1,000,000

That is, the United States is now in possession of water power taken from the C. D. Co., of the value of $2,200,000

There still remains 12,500 horse power. This, as soon as remedial works are constructed, can be, and no doubt, will be, used through the United States plant, or some new plant, or through the M. L. S. P. Co. canal. Col. Davis says capacity of this canal is 32,000 c. s. f. (R. 232.) Rental value at $5 per horse power, $62,500, capitalized at 5%, gives value 1,250,000

This would give an award, as claimed in our brief, of $3,450,000

We claim this to be the just award under the findings of the Judge.

April 3, 1913.

JOHN H. GOFF,
Attorney for Respondent.

A. B. ELDREDGE,
MOSES HOOPER,
Of Counsel.

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM 1912.

UNITED STATES,
PLAINTIFF IN ERROR,
vs.
CHANDLER-DUNBAR WATER POWER CO.
No. 783.

CHANDLER-DUNBAR WATER POWER CO.
PLAINTIFF IN ERROR,
vs.
UNITED STATES,
No. 784.

Now comes the Chandler-Dunbar Water Power Company and moves this Court for leave to file for consideration of the Court the annexed brief memoranda respecting jurisdiction.

JOHN H. GOFF,
Attorney for C. D. Co.

A. B. ELDREDGE,
MOSES HOOPER,
Of Counsel.

SUPREME COURT OF THE UNITED STATES.

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CHANDLER-DUNBAR WATER POWER CO.
PLAINTIFF IN ERROR,
vs.
UNITED STATES,
No. 784.

Error to the District Court of the United States for the Western District of Michigan.

Memoranda Relating to Jurisdiction.

Inasmuch as the United States took writ of error from this Court to the trial court, the C. D. Co., thinking this to be the correct practice, presented no brief on the question of jurisdiction. The question having been raised, by the Court, on argument, we present the following memoranda:

The question is, Was it proper for this Court to send down a writ of error herein to bring up the record for review?

The proceeding was to determine "just compensation" to be paid by the United States to the riparian on account of the

taking, for public use for navigation, of the bank and bed and flow of a public navigable river.

We think it was proper for this Court to send down the writ. The Federal Statute relating to this question is section 238 of chapter 231, being the Judicial Code. (36 Stat. 1157.) It provides that

> "Appeals and writs of error may be taken from the district courts * * * direct to the Supreme Court in the following cases * * * in any case that involves the construction or application of the constitution of the United States."

This act is in the same language as subdivision 4 of section 5 of chapter 517 of the Federal Laws of 1891 (26 Stat. 828).

I.

Commerce Clause.

Does the review of the determination of the trial court herein involve "the construction or application of the constitution of the United States?" That it does seems to us to be plainly and correctly decided in Cummings vs. Chicago (188 U. S. 410, 425-6. 1902). In that case, the plaintiffs, citizens of Illinois, contended that the City of Chicago, also a citizen of Illinois, prevented their building a dock on a navigable water of the United States, the building of which was authorized by the United States, but was not authorized by the State of Illinois. The original jurisdiction of the Federal trial court depended upon whether or not the action was one "arising under the constitution or laws of the United States" (25 Stat. 434). Respecting such original jurisdiction, this Court (speaking by Mr. Justice Harlan) held that

> "The present suit does arise under the Constitution and laws of the United States, because the plaintiffs base their right to construct the dock in question upon the Constitution of the United States, as well as upon certain acts of Congress and the permit (so-called) of the Secretary

> of War—which legislative enactments and action of the Secretary of War were, it is alleged, in execution of the power of Congress under the Constitution over the navigable waters of the United States. Clearly, such a suit is one arising under the Constitution and laws of the United States." (426.)

The jurisdiction of this Court to review the action of the Federal Circuit Court depended on whether or not such review involved "the construction or application of the constitution of the United States" (26 Stat. 828). This court held (speaking by Mr. Justice Harlan),

> "The present case belongs to that class; for, it involves the consideration of questions relating to the power of Congress, under the Constitution, over the navigable waters of the United States." (426.)

Both such rulings seem to us decisive of the question of jurisdiction herein. The determination was based on the commerce clause of the Constitution, as appears by the further language of Mr. Justice Harlan in opinion upon the merits, to-wit,

> "Calumet River, it must be remembered, is entirely within the limits of Illinois, and the authority of the State over it is plenary, subject only to such action as Congress may take in execution of its power under the Constitution to regulate commerce among the several States." (427.)

United States vs. Grizzard (219 U. S. 180) was in this Court on writ of error to the Federal Trial Court. No question of jurisdiction seems to have been raised. The only ground for writ of error from this court seems to us to have been the commerce clause. Probably no such question was raised on account of decision in Cummings vs. Chicago. Same may be said of United States vs. Welch (217 U. S. 333). May not same be said of United States vs. Lynah (188 U. S. 445)? On what other ground could writ of error from this Court go in that case?

Mr. Justice Brewer, making statement of the case, says,

> "The case involving the application of the Constitution of the United States was brought on writ of error directly to this court." (452.)

Point Raised.

Herein are presented, by the United States, for review, very many assignments of error, based upon exceptions taken on the trial, nearly all of which relate to the extent of the paramount authority of the United States over navigable rivers, which paramount authority rests alone on the commerce clause of the Constitution. It seems to us that the length and breadth of such paramount authority in many particulars seems necessary to a ruling upon such assignments of error. Among such assignments of error pressed upon this Court in brief and argument are No. LIV., refusal of the trial court to conclude "that the dominion of the United States over navigable waters for the purpose of commerce is the same as over the public domain." Refusal of the Judge to approve of the third request of the petitioner for conclusion of law. (R. 292.) (Brief 15.)

Also from assignment of error No. LV., refusal of this Court to conclude

> "That the navigable waters of the United States, with their beds, for the purpose of commerce and navigation, being the public property of the Nation, when any portion of this property is required by the United States for its uses in aid of navigation, there is no condemnation necessary. It is only necessary for Congress to order the taking of the part needed for the specified use."

Refusal of the Judge to approve of the fifth request of the petitioner for conclusion of law. (R. 292.) (Brief 16.)

Also from assignment of error XCI., the conclusion of the Court that

> "Subject to the power of Congress to regulate commerce, the Chandler-Dunbar Water Power Company as a riparian proprietor, was entitled to the continued flow of the water past its shore without diminution or limitation."

The granting of the twentieth request by the C. D. Co. for conclusion of law. (R. 307-8.) (Brief 29.)

12th request of the United States, Assignment of Errors LXI. (R. 472.),

> "That under the power conferred upon Congress by the Constitution to regulate commerce, the United States possesses, provided Congress sees fit to exercise it, the right to control all structures and works which interfere in any manner with the navigable capacity of navigable waters of the United States which, either by themselves or in connection with other waters, form channels for interstate commerce."

Approved conditionally. Both the United States and the C. D. Co. excepted. (R. 294.)

Also from assignments of error XCIX. and C., the conclusion of the Court that

> "The existing necessity in this case for taking the uplands and some of the submerged lands and flow of the water for purposes of navigation is actual, present, and direct; as to the remainder of the submerged lands and flow of the water, such necessity is constructive, secondary, and incidental."

And that

> "For the taking of the submerged land and flow of the water directly necessary under the previous paragraph, there can be no compensation; for that as to which only the incidental necessity exists, compensation must be paid."

The adoption of conclusions of law No. VI. and VII. (R. 310.) (Brief 32.)

Many other assignments of error relate directly to rulings based on the interpretation and application of said commerce clause.

Herein are presented by the C. D. Co. for review assignments of error based upon conclusions of law based upon the interpretation and application of such commerce clause. Among them are assignment second, charging error arising through adoption of conclusion of law XXVI. (R. 313.)

> "In this case the prima facie or normal rights of the riparians to the benfit of the inchoate power on their submerged land (above the maximum 4,000 c. s. f. estimate for the locks, etc.) is so unusually and peculiarly hampered, uncertain, and vague as to put upon the riparians the burden of showing by clear and convincing evidence that the water power for which they ask compensation is beyond the objection that the difficulties of the situation make it too speculative for computation."

Through refusal of request 5 (R. 304),

> "The question is, what would the bed and flow of the river appurtenant to the Chandler-Dunbar Water Power Company uplands have probably been worth to that company, or to its successors in title, if the United States had condemned the upland and from time to time taken only so much of the bed and flow as it might need for fullest development and improvement in aid of navigation?"

Assignment third, charging error in conclusion XXIX. (R. 314),

> "The fact that the diversion through the Michigan-Lake Superior Power Canal was at first supposed not to diminish the flow of water through the rapids on the American side, and the fact that this diversion has been under the control and regulation of the War Department

and has been stopped when the War Department thought best, destroy the force of such diversion as evidence upon the question of what water may be beyond need in aid of navigation."

Fourth assignment of error based on conclusion XXX. (R. 314),

"The present United States project for the development of power in the rapids has no evidential force upon the question of what water is beyond need in aid of navigation."

Also refusal of request 24th (R. 308),

"The Chandler-Dunbar Water Power Company is entitled to the value of the use on a nine-foot head of the volume of water planned to be used for water-power purposes by the United States in the bed of the stream."

Many other similar assignments of error by the Chandler-Dunbar Water Power Company relate directly to rulings based on the interpretation and application of said commerce clause.

II.

Fifth Amendment.

It would also seem that the challenge of the award as a violation of the clause in the Fifth Amendment "Nor shall private property be taken for public use without just compensation," is good ground for sending writ of error from this Court.

The findings show that the C. D. Co. owned 30,0000 horse power of water power. Also that award was made for only 6,500 horse power, leaving, outside the award, 23,500 horse power of water power, found to be of the annual rental value of $5 per horse power,—total rental value $117,500. For this no award was made, or attempted, or pretended, to be made. It is inconceivable that it is of no value. It is evident that it

will be of substantially the value above stated to the United States.

One thousand horse power of this is the product of the excess of water taken into the United States development over the amount of 6,500 horse power for which award was made. This is leased or held for lease by the United States. (Brief 68-9-0). Twenty thousand horse power is that used, or usable, through the M. L. S. P. Co. canal, about 10,000 of which is now leased to the M. L. S. P. Co. by the United States. (Brief 70-77.) The remaining 2,500 is that amount at large in the stream for which there does not appear to be any developed plan for use, unless it can be used through the M. L. S. P. Co. canal.

It is evident that this result, the failure to make any award for 23,500 horse power of water power owned by the C. D. Co. comes, either from a violation of the constitutional provision, "Nor shall private property be taken for public use without just compensation" or from some immunity therefrom growing out of the commerce clause. Either view gives this court jurisdiction to review the judgment of the trial court on writ of error direct to that court.

Point Raised.

Specific, and it seems to us, appropriate, findings and conclusions respecting these parcels of water power were requested on the trial by the C. D. Co.

As to the United States development, see refusal to conclude as per request nine (R. 305),

> "Just compensation requires the allowance to the Chandler-Dunbar Water Power Company of the value of the use of the water which the United States has planned to impound by the present works being now constructed in the bed of the river for power purposes. Such allowance not to exceed the value of the use of the same by the Chandler-Dunbar Water Power Company on its submerged lands."

This request was disapproved and the C. D. Co. excepted to the disapproval. (R. 305.)

As to the 10,000 or 20,000 horse power to be used through the M. L. S. P. Co. canal, see 6th request of the C. D. Co., to-wit,

> "Such use of the flow of the water and submerged land for private—proprietary—purposes as it appears probable that the United States may and will make, or can properly make, should be supposed to have been within the capacity of the riparian to make, and just compensation should be fixed on such basis."

This request was disapproved and the C. D. Co. excepted to the disapproval. (R. 304).

See refusal of request eighth (R. 304),

> "Just compensation requires the allowance to the Chandler-Dunbar Water Power Company of the value of the use of the water which the United States has planned to divert into the power canal of the Michigan-Lake Superior Power Company, and to lease by the United States for power purposes. Such allowance not to exceed the value of the use of the same by the Chandler-Dunbar Water Power Company on its submerged lands."

Also the 20th request of the C. D. Co., to-wit,

> "Subject to the power of Congress to regulate commerce, the Chandler-Dunbar Water Power Company, as a riparian proprietor, was entitled to the continued natural flow of the water of the River St. Mary past its shore without diminution or alteration."

Approved. To which ruling, counsel for the United States excepted.

Request 3 (R. 303).

> "The proper and primary right of the United States to the bed and flow of water of public navigable rivers is to use and manipulate the same in the interest of navigation, and it has no power under that claim of right to take

the fee title in either the bed or the flow without just compensation for such taking."

Request refused and C. D. Co. excepted.

Counsel for the United States were also aware that the C. D. Co. relied upon the Fifth Amendment.

See Assignment of Error LIX., refusal of this Court to conclude

> "That while the submerged lands remain a part of the bed of the river it is not private property in the sense of the Fifth Amendment to the Federal Constitution."

Disapproved so broadly stated. (R. 293.)

Both the United States and the C. D. Co. excepted.

24th request of the United States,

> "The determination of Congress, * * * requiring said power development companies to vacate the bed of the stream and the taking of the possession thereof and erecting upon the submerged lands of public works in aid of navigation is not a taking of private property for public use within the meaning of the fifth amendment to the Federal Constitution and requires no condemnation or compensation before such right upon the submerged lands may be exercised."

Disapproved so broadly stated. Both parties excepted to the ruling. Assignment of errors LXIX. (R. 474.)

25th request of the United States, Assignment of Errors LXX. (R. 474.),

> "If, in the installation in said river bed of public works of the Government, primarily intended as improvements to navigation or in the methods of said navigation, carried on by the Government, there may be from time to time found a quantity of water which can be availed of for developing power, it is competent for the Government to conserve and use said power from the economic policy

of preventing waste of natural resources; it is merely incident to regulation of navigation and is not a taking of private property without compensation for the Government to use, sell, or lease such possible surplus water power so developed by its own works in aid of navigation and apply the proceeds to the Public Treasury."

Approved with conditional statement. Both United States and C. D. Co. excepted (R. 297-8).

44th request of the United States, (R. 302) Assignment of Errors LXXXV. (R. 478.),

"I find as a matter of law that under Art. I, section 8, of the Constitution of the United States, which provides that Congress shall have power 'to regulate commerce with foreign nations and among the several States, and with the Indian tribes,' the riparian rights of the Chandler-Dunbar Company in the subaqueous land and the usufruct of the water flowing over such land are subject to the paramount right of the United States for the purpose of commerce, which includes navigation without compensation or condemnation, such submerged lands and waters being public and not private property."

Disapproved so broadly stated. To which ruling, the United States and the C. D. Co. both excepted.

Riparian Property.

The riparian on navigable waters has property within the meaning of the Amendment notwithstanding the paramount rights of the United States in such waters.

In United States vs. Lynah, 188 U. S. 445, Mr. Justice Brewer says,

"So the contention that the government had a paramount right to appropriate this property may be conceded, but the Constitution, in the Fifth Amendment, guarantees that when this governmental right of appropriation—this asserted paramount right—is exercised, it shall be attended by compensation." (465.)

In Monongahela Navigation Co. vs. United States, 148 U. S. 312, Mr. Justice Brewer said,

> "Upon what does the right of Congress to interfere in the matter rest? Simply upon the power to regulate commerce. This is one of the great powers of the national government, one whose existence and far-reaching extent have been affirmed again and again by this court in its leading opinions, and the power of Congress over such natural highways as navigable streams is confessedly supreme." " (335.)

> "But like the other powers granted to Congress by the Constitution, the power to regulate commerce is subject to all the limitations imposed by such instrument, and among them is that of the Fifth Amendment, we have heretofore quoted. Congress has supreme control over the regulation of commerce, but if, in exercising that supreme control, it deems it necessary to take private property, then it must proceed subject to the limitations imposed by this Fifth Amendment, and can take only on payment of just compensation." (336.)

III.

Cross Writs.

Each party felt aggrieved by the award for water power taken. Each party assigned error. Each party was granted a writ of error to bring to this court that part of the record on which it based its assignments of error. Under such conditions, if this court has jurisdiction to review upon one writ it has upon both. The entire matter is here for review.

Field vs. Barber Asphalt Co., 194 U. S. 618-9.

April, 1913.

JOHN H. GOFF,

Attorney for C. D. Co.

A. B. ELDREDGE,

MOSES HOOPER,

Of Counsel.

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1912.

ST. MARY'S POWER COMPANY,
Plaintiff in Error,
vs.
THE UNITED STATES.

No. 785.

BRIEF FOR ST. MARY'S POWER COMPANY, PLAINTIFF IN ERROR.

A portion of the property which has been taken under the Act of Congress for canal purposes at the Falls of the St. Mary's River, on which is situated the City of Sault Ste. Marie, is known as Island No. 5. The title to this property is in dispute between the United States and the St. Mary's Power Company. The last named company is in possession under claim of title, and has been for a number of years. An ejectment suit brought by the United States against the Company is now pending, having been tried two or more times and now standing for a new trial. Before instituting these proceedings the United States made a tender of $10,000 to the St. Mary's Power Company for Island No. 5.

We contend that by making such tender the United States recognized title in the St. Mary's Power Company and cannot later take the inconsistent position that the St. Mary's Power Company had no title, and therefore the value of Island No. 5 should be awarded to the St. Mary's Power Company in this proceeding. The court below refused to make such award and expressly left the question of title open to be determined later—we assume in the ejectment suit.

The total fall of the water in the St. Mary's River is approximately twenty feet. The upper riparian proprietor is the Chandler-Dunbar Water Power Company. The next lower riparian proprietor is the United States. The land owned by the United States has a frontage of substantially twenty-five hundred feet. The next and lowest land bordering on the river is Island No. 5, of which, as before stated, the St. Mary's Power Company is in possession as proprietor. Of the total fall of twenty feet, two feet takes place in that part of the river-bed which is appurtenant to Island No. 5. The Chandler-Dunbar Company has developed water power on its property. This development has, by permission of the United States, extended through its property by the cutting of a tailrace to a point opposite the upper line of Island No. 5. There has been no development on the property of the St. Mary's Company.

We contend that the water power in the St. Mary's River, all of which is taken by this proceeding and all of which is physically capable of development as a unit, should be valued as a unit, and that the owners of Island No. 5 should be awarded, as compensation, that proportion of the total unitary value of the water power which the fall opposite Island No. 5—two feet—bears to the total fall of the river—twenty feet—or one-tenth. The court below held that the fact that there is land owned by the United States between the Chandler-Dunbar land and Island No. 5 made it improper to award compensation upon the basis contended for by us.

The questions involved, above indicated, are raised by exceptions to findings of fact and of law and refusals to make such findings made by the District Judge, and assignments of error based on such exceptions. To set out each assignment of error, finding, proposed finding and exception would be confusing rather than enlightening. We shall therefore set out one or two of the boarder assignments on each question involved and refer to the others.

The third assignment of error (Rec. 589) is:

> "Third. The court erred in concluding and finding as a matter of law as concluded and found in conclusion of law thirty-seven, viz.:
>
> 'The fact that the United States before commencing its proceeding made an offer to the St. Mary's Power Company for Island No. 5, and on its refusal made the St. Mary's Power Company a respondent to this proceeding does not estop the United States from continuing to claim in the pending ejectment

suit that it is the owner of the island. The compensation awarded for this island and its appurtenant rights should be paid into court, there to await the determination of the title.'"

The finding upon which this is based is found in the record, p. 114. The proposed findings on this question are to be found in the record at page 63; the exceptions on behalf of the St. Mary's Power Company, in the record, p. 352. The assignment of error Nos. 7 and 8 (Rec. 590) also raise this question.

The question as to the proper method of determining the value of the water power appurtenant to Island No. 5 is raised by the assignment of error following, namely:

"First. The court erred in refusing to conclude and find as matter of law as requested by said respondent in its first request, viz.:

'In determining the value to be assigned to Island No. 5 in view of the natural conditions presented, the value of the water power should be determined as a unit proposition, and therefore Island No. 5 is entitled to that proportion of value which the fall in front of Island No. 5 bears to the total fall.'"

"Second. The court erred in refusing to conclude and find as a matter of law as requested by said respondent in its fifth request, viz.:

'The United States is not entitled simply by virtue of the ownership of the intervening land between the Chandler-Dunbar properties and those of the St. Mary's Company, namely, Island No. 5, to act arbitrarily in refusing to join in a development of the falls as a unit.'"

"Fourth. The court erred in concluding and finding as a matter of law as concluded and found in conclusion of law thirty-nine, viz.:

'The fact that there is intervening ownership between the fall of the Chandler-Dunbar Company and the fall of Island No. 5 makes it improper to award compensation for the water power appurtenant to Island No. 5 wholly upon the basis of its percentage of the total fall of the two riparian proprietors added together.'"

The question is also raised by assignments of error Nos. 9-20 and 22 and 23. The proposed findings of fact on this question are to be found in Record, 64-66, and of law Record, 114 and 115. The exceptions to the refusal to

make the proposed findings and to the findings as made are to be found in Record, p. 352.

In our first contention that the United States, by making a tender to the St. Mary's Power Company for Island No. 5, recognized the title of that company and cannot later be heard to deny that title, we rely upon the familiar doctrine that a party will not be permitted at one time to take one position or course of action and at another time a different and inconsistent position or course of action with reference to the same subject matter.

See *Bigelow Estoppel*, 5th Ed., Chap. 21, Sec. 2, p. 683, et seq., especially p. 687 et seq.

A similar case to the one at bar is

Princeton v. Templeton, 71 Ill., 68,

where it was held that a municipality which had fixed and approved compensation for the laying out of a street, and levied an assessment for the payment thereof, could not thereafter undertake to take possession and grade the strip of land in question without making compensation therefor on the ground that the same had been previously dedicated.

To the same effect is

In re City of New York, City of New York v. N. W. Johns-Manville Co., 140 *N. Y. Supp., App. Div.* 124, *decided February* 14, 1913.

The City began proceedings to condemn the lands of the claimants for ferry purposes. After an award had been made by the commissioners, their report coming up for confirmation, the City of New York contended that the claimants were not the owners of the property. The Court said:

> "The City of New York in its petition alleged that it had no interest in the lands proposed to be taken, and it is hardly in a position now to urge title in the city for street purposes."

Suppose the St. Mary's Power Company had accepted the tender made. Could the United States later have brought suit to recover back the money paid, or could it have revoked the tender?

We contend that, as all the water taken is capable of a unitary power development, it should be valued as a unit and the St. Mary's Power Company awarded its relative proportion of the total unitary value. If all the lands on

which the total fall occurs were owned by one riparian proprietor, then, clearly, the water power must be valued as a unit. The fact that the total fall is spread over lands of three riparian proprietors cannot affect the value of the water power. It is the same water power whether owned by one or by any larger number.

If an individual third party had proceeded to purchase all these lands for purposes of power development, the price which would have been ultimately agreed upon would, of necessity, have been based upon the fact that all the lands taken together as a unit had a value for water power development greater than the aggregate of each separate parcel, and each riparian proprietor would have asked and received a sum based on his relative proportion of the total fall. The fact that it is the United States which owns one of these pieces cannot affect the question. Can it be that the ownership or acquisition of one parcel by the United States diminished or destroyed a part of the value of an adjoining parcel? If the riparian lands had been owned by three individuals and one had accepted the government tender, would that have had any effect on the value of the lands of the other proprietors?

The same rules should be applied to the situation in the case at bar as were considered and determined by this Court in

Boom Company v. Patterson, 98 U. S. 403.

There the defendant owned three islands in the Mississippi River which the petitioner had instituted a proceeding to take for use in connection with the lands of the petitioner on the shore, to form a boom. The defendant was allowed in the lower court $300 for the value of the islands, aside from any consideration of their value for boom purposes, and $5,200 in addition, in view of their adaptability to boom purposes. The question before the Court was the principle upon which compensation should be estimated. The Court, in passing upon that question said:

> "Upon the question litigated in the court below, the compensation which the owner of the land condemned was entitled to receive, and the principle upon which the compensation should be estimated, there is less difficulty. In determining the value of land appropriated for public purposes, the same considerations are to be regarded as in a sale of property between private parties. The inquiry in such cases must be what is the property worth in the market, viewed not merely with reference to the

uses to which it is at the time applied, but with reference to the uses to which it is plainly adapted; that is to say, what is it worth from its availability for valuable uses. Property is not to be deemed worthless because the owner allows it to go to waste, or to be regarded as valueless because he is unable to put it to any use. Others may be able to use it, and make it subserve the necessities or conveniences of life. Its capability of being made thus available gives it a market value which can be readily estimated.

"So many and varied are the circumstances to be taken into account in determining the value of property condemned for public purposes, that it is perhaps impossible to formulate a rule to govern its appraisement in all cases. Exceptional circumstances will modify the most carefully guarded rule; but, as a general thing, we should say that the compensation to the owner is to be estimated by reference to the uses for which the property is suitable, having regard to the existing business or wants of the community, or such as may be reasonably expected in the immediate future.

"The position of the three islands in the Mississippi fitting them to form, in connection with the west bank of the river, a boom of immense dimensions, capable of holding in safety over twenty millions of feet of logs, added largely to the value of the lands. The boom company would greatly prefer them to more valuable agricultural lands, or to lands situated elsewhere on the river; as, by utilizing them in the manner proposed, they would save expenditures of money in constructing a boom of equal capacity. Their adaptability for boom purposes was a circumstance, therefore, which the owner, had a right to insist upon as an element in estimating the value of his lands.

". . . The adaptability of the land for the purpose of a boom was, therefore, a proper element for consideration in estimating the value of the lands condemned. The contention on the part of the plaintiff in error is, that such adaptability should not be considered, assuming that this adaptability could never be made available by other persons, by reason of its supposed exclusive privileges; in other words, that by the grant of exclusive privileges to the company the owner is deprived of the value which the lands, by their adaptability for

boom purposes, previously possessed, and therefore should not now receive anything from the company on account of such adaptability upon a condemnation of lands. We do not think that the owner, by the charter of the company, lost this element of value in his property."

(Pp. 407-409.)

The case of

Boston Chamber of Commerce v. City of Boston,
217 U. S. 189,

we think should be considered as being one of "exceptional circumstances" which, as stated in Boom Company v. Patterson, above quoted, "will modify the most carefully guarded rule."

We do not discuss the question as to the amount of damages which should be awarded in these proceedings for the value of the water power taken, but, rather, leave that to those respondents whose financial interest is greater. What we do ask is that whatever sum is awarded the Candler-Dunbar Company for water power taken, a proportionate sum be awarded to the St. Mary's Power Company. That is, a sum should be awarded the St. Mary's Power Company as damages for water power taken which bears the same relation to the sum awarded the Chandler-Dunbar Company that the fall opposite the lands of the St. Mary's Power Company bears to the fall opposite the lands of the Chandler-Dunbar Company.

In our discussion of the question of the amount of damages which should be awarded, we have assumed that the St. Mary's Power Company is the owner of Island No. 5. This assumption of ownership must, of necessity, be made in any consideration of the question, whether the fact of ownership is determined in this proceeding or left to some other proceeding.

The award appealed from should be modified in the particulars stated.

STEVENSON, CARPENTER & BUTZEL,
Of Counsel for St. Mary's Power Company.

WILLIAM L. CARPENTER,
Attorney for Plaintiff in Error.

UNITED STATES *v.* CHANDLER-DUNBAR WATER POWER COMPANY.

CHANDLER-DUNBAR WATER POWER COMPANY *v.* UNITED STATES.

ST. MARYS POWER COMPANY *v.* UNITED STATES.

BROWN, RECEIVER OF THE MICHIGAN LAKE SUPERIOR POWER COMPANY, *v.* UNITED STATES.

ERROR TO THE DISTRICT COURT OF THE UNITED STATES FOR THE WESTERN DISTRICT OF MICHIGAN.

Nos. 783, 784, 785, 786. Argued April 28, 1913.—Decided May 26, 1913.

The technical title to the beds of navigable rivers of the United States is either in the States in which the rivers are situated, or in the riparian owners, depending upon the local law.

Upon the admission of Michigan as a State into the Union the bed of the St. Marys River passed to the State; under the law of Michigan a conveyance of land bordering upon a navigable river carries the title to the middle thread.

The title of the riparian owner to the bed of a navigable stream is a qualified one, and subordinate to the public right of navigation and

subject to the absolute power of Congress over the improvement of navigable rivers.

Under the Constitution, Congress can adopt any means for the improvement of navigation that are not prohibited by that instrument itself.

Commerce includes navigation and it is for Congress to determine when and to what extent its powers shall be brought into activity. *Gilman* v. *Philadelphia*, 3 Wall. 713.

The judgment of Congress as to whether a construction in or over a navigable river is or is not an obstruction to navigation is an exercise of legislative power and wholly within its control and beyond judicial review; and so *held* as to the determination of Congress that the whole flow of St. Marys River be directed exclusively to the improvement thereof by the erection of new locks therein.

The flow of the stream of a navigable river is in no sense private property, and there is no room for judicial review, at the instance of a private owner of the banks of the stream, of a determination of Congress that such flow is needed for the improvement of navigation.

One placing obstructions in a navigable stream under a revocable permit of the Secretary of War does not acquire any right to maintain the same longer than the Government continues the license; and an act of Congress revoking the permit does not amount to a taking of private property so far as exclusion from what was covered by the permit is concerned.

Private ownership of running water in a great navigable stream is inconceivable.

Every structure in the water of a navigable river is subordinate to the right of navigation and must be removed, even if the owners sustain a loss thereby, if Congress, in assertion of its power over navigation so determines.

The act of Congress of March 3, 1909, declaring that a public necessity existed for absolute control of all the water of St. Marys River excludes forever all structures necessary for commercial use of the water power, regardless of whether there may be any surplus in the flow beyond that required for purposes of navigation.

Even if the act declaring that the entire flow of a navigable stream is necessary for navigation provides for the sale of surplus power, the act is still a taking for the purposes of navigation and not for a commercial use.

If the primary object is a legitimate taking there is no objection to the usual disposition of what may be a possible surplus of power. *Kaukauna Co.* v. *Green Bay Canal*, 142 U. S. 254.

An objection to selling excess water power resulting from construction of works for the improvement of navigation cannot be made by one who has no property right in the water which has been taken.

An owner of upland bordering on a navigable river which is taken under condemnation by the Government for the purpose of improving navigation is entitled to compensation for the fair value of the property, but not to any additional values based upon private interest in the potential water power of the river.

The Fifth Amendment is satisfied by payment to the owner of what he actually loses; it does not demand what the taker has gained. *Chamber of Commerce* v. *Boston*, 217 U. S. 189.

One whose property is taken by the Government for improvement of the navigation of the river on which it borders is not entitled to the probably advanced value by reason of the contemplated improvement. The value is to be fixed as of the date of the proceedings.

One whose land is taken by the Government for a particular purpose is entitled to have the fact that the land is peculiarly available for such purpose considered in the appraisal. *Boom Co.* v. *Patterson*, 98 U. S. 403.

Where a survey of a town site has not been carried out the title of the streets does not pass out of the United States and the value of the street cannot be added to that of the abutting property in condemnation proceedings at the instance of the United States.

The owner of a separate parcel is not entitled to additional value resulting as part of a comprehensive scheme of improvement, requiring the taking of his and other property. *Chamber of Commerce* v. *Boston*, 217 U. S. 189.

"Strategic value" cannot be allowed in condemnation proceedings; the value of the property to the Government for a particular use is not the criterion. The owner is compensated when he is allowed full market value.

Where the state of the title and pending litigation affecting it is set up in the pleadings, the fact that the Government seeks condemnation of the property does not amount to conceding that the title is in the party claiming it and against whom the proceeding is directed. In this case all rights were reserved.

THESE writs of error are for the purpose of reviewing a judgment in a condemnation proceeding instituted by the United States under the eleventh section of an act of

Congress of March 3, 1909, 35 Stat., pp. 815, 820, c. 264. The section referred to is set out in the margin.[1]

The notice of condemnation required by the statute was duly given by the Secretary of War and this pro-

[1] SEC. 11. That the ownership in fee simple absolute by the United States of all lands and property of every kind and description north of the present Saint Marys Falls Ship Canal throughout its entire length and lying between said ship canal and the international boundary line at Sault Sainte Marie, in the State of Michigan, is necessary for the purposes of navigation of said waters and the waters connected therewith.

The Secretary of War is hereby directed to take proceedings immediately for the acquisition by condemnation or otherwise of all of said lands and property of every kind and description, in fee simple absolute. He shall proceed in such taking by filing in the office of the register of deeds of Chippewa County, in the State of Michigan, a writing, stating the purpose for which the same is taken under the provisions of this section, and giving a full description of all the lands and property of every kind and description thus to be taken. After the filing of said writing, and ten days after publication thereof in one or more newspapers in the city of Sault Sainte Marie, in the State of Michigan, the United States shall be entitled to, and shall take, immediate possession of the property described, and may at once proceed with such public works thereon as have been authorized by Congress for the uses of navigation.

The Circuit Court of the United States for the western district of Michigan is hereby given exclusive jurisdiction to hear condemnation proceedings and to determine what compensation shall be awarded for property taken under authority of this section. After the taking of any property by the Government of the United States, as herein provided for, the United States, by its proper officials, shall begin condemnation proceedings in the aforesaid court, and the practice shall be in accordance with the practice in the courts of the State of Michigan for the condemnation of lands by the State for public buildings of such State so far as the same may be followed without conflicting with the provisions hereof. Possession may be taken by the United States prior to a determination by a court of any necessity of taking, and prior to any determination of the amount of compensation.

Any money payable by the Government under the provisions of this section shall be payable out of any money heretofore authorized or appropriated for the purpose of improving Saint Marys River at the falls, Michigan.

ceeding was instituted against all the corporations and persons supposed to have any interest in the property sought to be condemned. A jury was waived and the

All that part of "An Act making appropriations for the construction, repair, and preservation of certain public works on rivers and harbors, and for other purposes," approved March second, nineteen hundred and seven, beginning with the words "and all lands and waters north of the present Saint Marys Falls ship canal throughout its length," and ending with the words "to comply with the provisions of the river and harbor Act of nineteen hundred and two, but such lands, if so acquired, shall be obtained without expense to the United States," is hereby repealed.

Every permit, license, or authority of every kind, nature, and description heretofore issued or granted by the United States, or any official thereof, to the Chandler-Dunbar Water Power Company, the Edison Sault Light and Power Company, the Edison Sault Electric Company, or the Saint Marys Power Company, shall cease and determine and become null and void on January first, nineteen hundred and eleven, and the Secretary of War is hereby authorized and instructed to revoke, cancel, and annul every such permit, license or authority, to take effect on January first, nineteen hundred and eleven.

The Secretary of War may, in his discretion, permit the Chandler-Dunbar Water Power Company and the Edison Sault Electric Company to maintain their present works and utilize the water power in said river at said rapids, in so far as the same does not interfere with navigation, or retard the construction of government works in said river, under such rules or regulations as have been or hereafter shall be imposed by the Secretary of War, until they shall be paid the compensation awarded by the court for their property condemned under the provisions of this section; but said permit shall not extend beyond January first, nineteen hundred and eleven.

The President of the United States is respectfully requested to open negotiations with the Government of Great Britain for the purpose of effectually providing, by suitable treaty with said Government, for maintaining ample water levels for the uses of navigation in the Great Lakes and the waters connected therewith, by the construction of such controlling and remedial works in the connecting rivers and channels of such lakes as may be agreed upon by the said governments under the provisions of said treaty.

The Secretary of War is further authorized and instructed to cause to be made a preliminary examination and survey to ascertain and

evidence submitted to the court, which, at the request of all the parties, made specific findings of fact and law.

By an agreement, the property of the International Bridge Company required by the Government was acquired by deed, and later in the progress of the case the property of the Edison-Sault Electric Company involved in the proceeding was acquired by stipulation. This eliminates from the cases every question except those arising in respect of the compensation to be awarded to the Chandler-Dunbar Water Power Company, the St. Marys Power Company and Clarence M. Brown, Receiver of the Michigan Lake Superior Power Company. The final judgment of the court was:

1. That the ownership in fee simple absolute by the United States of all lands and property of every kind and description north of the present St. Marys Falls Ship Canal, throughout its entire length and lying between the said ship canal and the international line at Sault St. Marie, in the State of Michigan, was necessary for the purposes of navigation of said waters and the waters connected therewith as declared by the act of March 3, 1909.

The compensation awarded was as follows:

a. To the Chandler-Dunbar Company, $652,332. Of this $550,000 was the estimated value of the water power.

b. To the St. Marys Falls Power Company, $21,000.

c. To the Edison-Sault Electric Company, $300,000, which has, however, been settled by stipulation.

d. To the Michigan Lake Superior Power Co., nothing.

From these awards the Government, the Chandler-Dunbar Company, the St. Marys Falls Power Company, and the Michigan Lake Superior Power Company, have sued out writs of error.

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determine a proper plan and the probable expense for constructing in the rapids of the Saint Marys River a filling basin or forebay, from which the ship locks shall be filled: Provided, That such survey shall in no way delay or interfere with the plans for construction already under way.

The errors assigned by the United States challenge the allowance of any compensation whatever on account of any water power right claimed by any of the owners of the condemned upland, and also the principles adopted by the District Court for the valuation of the upland taken. The several corporations, who have sued out writs of error, complain of the inadequacy of the award on account of water power claimed to have been taken, and also of the valuation placed upon the several parcels of upland condemned.

The errors assigned by the United States deny that any water power in which the defendants below had any private property right has been taken, and also deny the claim that riparian owners must be compensated for exclusion from the use of the water power inherent in the falls and rapids of the St. Marys River, whether the flow of the river be larger than the needs of navigation or not. The award of $550,000 on account of the claim of the Chandler-Dunbar Company to the undeveloped water power of the river at the St. Marys rapids in excess of the supposed requirements of navigation constitutes the prime question in the case, and its importance is increased by the contention of that company that the assessment of damages on that account is grossly inadequate and should have been $3,450,000.

Each of the several plaintiffs in error also challenge the awards made on account of the several parcels of upland taken,—the Government insisting that the awards are excessive, and the owners, that they are inadequate.

Mr. Assistant Attorney General Fowler, with whom *Mr. Reeves T. Strickland* was on the brief, for the United States.[1]

Mr. William L. Carpenter for St. Marys Power Company, plaintiff in error in No. 785, submitted.[1]

[1] See note on next page.

Mr. Moses Hooper, with whom *Mr. John H. Goff* and *Mr. A. B. Eldredge* were on the brief, for Chandler-Dunbar Water Power Company, defendant in error in No. 783 and plaintiff in error in No. 784.[1]

MR. JUSTICE LURTON, after making the foregoing statement, delivered the opinion of the court.

From the foregoing it will be seen that the controlling questions are, first, whether the Chandler-Dunbar Company has any private property in the water power capacity of the rapids and falls of the St. Marys River which has been "taken," and for which compensation must be made under the Fifth Amendment to the Constitution; and, second, if so, what is the extent of its water power right and how shall the compensation be measured?

That compensation must be made for the upland taken is not disputable. The measure of compensation may in a degree turn upon the relation of that species of property to the alleged water power rights claimed by the Chandler-Dunbar Company. We, therefore, pass for the present the errors assigned which concern the awards made for such upland.

The technical title to the beds of the navigable rivers of the United States is either in the States in which the rivers are situated, or in the owners of the land bordering upon such rivers. Whether in one or the other is a question of local law. *Shively* v. *Bowlby*, 152 U. S. 1, 31; *Philadelphia Company* v. *Stimson*, 223 U. S. 605, 624, 632; *Scott* v. *Lattig*, 227 U. S. 229. Upon the admission of the State of Michigan into the Union the bed of the St. Marys River passed to the State, and under the law

[1] The briefs in this case were very elaborate and exhaustive, several hundred authorities bearing on the issues involved are collated and reviewed. This renders it impossible to make abstracts of them.

of that State the conveyance of a tract of land upon a navigable river carries the title to the middle thread. *Webber* v. *The Pere Marquette &c.*, 62 Michigan, 626; *Scranton* v. *Wheeler*, 179 U. S. 141, 163; *United States* v. *Chandler-Dunbar Water Power Co.*, 209 U. S. 447.

The technical title of the Chandler-Dunbar Company therefore, includes the bed of the river opposite its upland on the bank to the middle thread of the stream, being the boundary line at that point between the United States and the Dominion of Canada. Over this bed flows about two-thirds of the volume of water constituting the falls and rapids of the St. Marys River. By reason of that fact, and the ownership of the shore, the company's claim is, that it is the owner of the river and of the inherent power in the falls and rapids, subject only to the public right of navigation. While not denying that this right of navigation is the dominating right, yet the claim is that the United States in the exercise of the power to regulate commerce, may not exclude the rights of riparian owners to construct in the river and upon their own submerged lands such appliances as are necessary to control and use the current for commercial purposes, provided only that such structures do not impede or hinder navigation and that the flow of the stream is not so diminished as to leave less than every possible requirement of navigation, present and future. This claim of a proprietary right in the bed of the river and in the flow of the stream over that bed to the extent that such flow is in excess of the wants of navigation constitutes the ground upon which the company asserts that a necessary effect of the act of March 3, 1909, and of the judgment of condemnation in the court below, is a taking from it of a property right or interest of great value, for which, under the Fifth Amendment, compensation must be made.

This is the view which was entertained by Circuit Judge Denison in the court below, and is supported by most

careful findings of fact and law and an elaborate and able opinion. The question is, therefore, one which from every standpoint deserves careful consideration.

This title of the owner of fast land upon the shore of a navigable river to the bed of the river, is at best a qualified one. It is a title which inheres in the ownership of the shore and, unless reserved or excluded by implication, passed with it as a shadow follows a substance, although capable of distinct ownership. It is subordinate to the public right of navigation, and however helpful in protecting the owner against the acts of third parties, is of no avail against the exercise of the great and absolute power of Congress over the improvement of navigable rivers. That power of use and control comes from the power to regulate commerce between the States and with foreign nations. It includes navigation and subjects every navigable river to the control of Congress. All means having some positive relation to the end in view which are not forbidden by some other provision of the Constitution, are admissible. If, in the judgment of Congress, the use of the bottom of the river is proper for the purpose of placing therein structures in aid of navigation, it is not thereby taking private property for a public use, for the owner's title was in its very nature subject to that use in the interest of public navigation. If its judgment be that structures placed in the river and upon such submerged land, are an obstruction or hindrance to the proper use of the river for purposes of navigation, it may require their removal and forbid the use of the bed of the river by the owner in any way which in its judgment is injurious to the dominant right of navigation. So, also, it may permit the construction and maintenance of tunnels under or bridges over the river, and may require the removal of every such structure placed there with or without its license, the element of contract out of the way, which it shall require to be re-

moved or altered as an obstruction to navigation. In *Gilman* v. *Philadelphia*, 3 Wall. 713, 724, this court said:

"Commerce includes navigation. The power to regulate commerce comprehends the control for that purpose, and to the extent necessary, of all the navigable waters of the United States which are accessible from a State other than those in which they lie. For this purpose they are the public property of the nation, and subject to all the requisite legislation by Congress. This necessarily includes the power to keep them open and free from any obstructions to their navigation, interposed by the States or otherwise; to remove such obstructions when they exist; and to provide, by such sanctions as they may deem proper, against the occurrence of the evil and for the punishment of offenders. For these purposes, Congress possesses all the powers which existed in the States before the adoption of the national Constitution, and which have always existed in the Parliament in England.

"It is for Congress to determine when its full power shall be brought into activity, and as to the regulations and sanctions which shall be provided."

In *Gibson* v. *United States*, 166 U. S. 269, it is said (p. 271):

"All navigable waters are under the control of the United States for the purpose of regulating and improving navigation, and although the title to the shore and submerged soil is in the various States and individual owners under them, it is always subject to the servitude in respect of navigation created in favor of the Federal Government by the Constitution."

Thus in *Scranton* v. *Wheeler*, *supra*, the Government constructed a long dyke or pier upon such submerged lands in the river here involved, for the purpose of aiding its navigation. This cut the riparian owner off from direct access to deep water, and he claimed that his rights had

been invaded and his property taken without compensation. This court held that the Government had not "taken" any property which was not primarily subject to the very use to which it had been put, and, therefore, denied his claim. Touching the nature and character of a riparian owner in the submerged lands in front of his upland bounding upon a public navigable river such as the St. Marys, this court said (p. 163):

"The primary use of the waters and the lands under them is for purposes of navigation, and the erection of piers in them to improve navigation for the public is entirely consistent with such use, and infringes no right of the riparian owner. Whatever the nature of the interest of a riparian owner in the submerged lands in front of his upland bounding on a public navigable water, his title is not as full and complete as his title to fast land which has no direct connection with the navigation of such waters. It is a qualified title, a bare technical title, not at his absolute disposal, as is his upland, but to be held at all times subordinate to such use of the submerged lands and of the waters flowing over them as may be consistent with or demanded by the public right of navigation."

So unfettered is this control of Congress over the navigable streams of the country that its judgment as to whether a construction in or over such a river is or is not an obstacle and a hindrance to navigation, is conclusive. Such judgment and determination is the exercise of legislative power in respect of a subject wholly within its control.

In *Pennsylvania* v. *Wheeling Bridge Company*, 18 How. 421, 430, this court, upon the facts in evidence, held that a bridge over the Ohio River, constructed under an act of the State of Virginia, created an obstruction to navigation, and was a nuisance which should be removed. Before the decree was executed Congress declared the bridge a lawful structure and not an obstruction. This court there-

upon refused to issue a mandate for carrying into effect its own decree, saying:

"Although it still may be an obstruction in fact, it is not so in the contemplation of law. We have already said, and the principle is undoubted, that the act of the legislature of Virginia conferred full authority to erect and maintain the bridge, subject to the exercise of the power of Congress to regulate the navigation of the river. That body having in the exercise of this power, regulated the navigation consistent with its preservation and continuation, the authority to maintain it would seem to be complete. That authority combines the concurrent powers of both governments, State and Federal, which, if not sufficient, certainly none can be found in our system of government."

In *Philadelphia* v. *Stimson*, *supra*, and in *Union Bridge Company* v. *United States*, 204 U. S. 364, many of the cases are cited and reviewed and we need add nothing more to the discussion.

The conclusion to be drawn is, that the question of whether the proper regulation of navigation of this river at the place in question required that no construction of any kind should be placed or continued in the river by riparian owners, and whether the whole flow of the stream should be conserved for the use and safety of navigation, are questions legislative in character; and when Congress determined, as it did by the act of March 3, 1909, that the whole river between the American bank and the international line, as well as all of the upland north of the present ship canal, throughout its entire length, was "necessary for the purposes of navigation of said waters and the waters connected therewith," that determination was conclusive.

So much of the zone covered by this declaration as consisted of fast land upon the banks of the river, or in islands which were private property, is, of course, to be paid for.

But the flow of the stream was in no sense private property, and there is no room for a judicial review of the judgment of Congress that the flow of the river is not in excess of any possible need of navigation, or for a determination that if in excess, the riparian owners had any private property right in such excess which must be paid for if they have been excluded from the use of the same.

That Congress did not act arbitrarily in determining that "for the purposes of navigation of said waters and the waters connected therewith," the whole flow of the stream should be devoted exclusively to that end, is most evident when we consider the character of this stream and its relation to the whole problem of lake navigation. The river St. Marys is the only outlet for the waters of Lake Superior. The stretch of water called the falls and rapids of the river is about 3,000 feet long and from bank to bank has a width of about 4,000 feet. About two-thirds of the volume of the stream flows over the submerged lands of the Chandler-Dunbar Company, the rest over like lands on the Canadian side of the boundary. The fall in the rapids is about 18 feet. This turbulent water, substantially unnavigable without the artificial aid of canals around the stream, constitutes both a tremendous obstacle to navigation and an equally great source of water power, if devoted to commercial purposes. That the wider needs of navigation might not be hindered by the presence in the river of the construction works necessary to use it for the development of water power for commercial uses under private ownership was the judgment and determination of Congress. There was also present in the mind of Congress the necessity of controlling the outflow from Lake Superior, which averages some 64,000 cubic feet per second. That outflow has great influence both upon the water level of Lake Superior and also upon the level of the great system of lakes below, which receive that outflow. A difference of a foot in the level of Lake

Superior may influence adversely access to the harbors on that lake. The same fall in the water level of the lower lakes will perceptibly affect access to their ports. This was a matter of international consideration, for Canada, as well as the United States, was interested in the control and regulation of the lake water levels. And so we find in the act of 1909 a request that the President of the United States will open negotiations with the Government of Great Britain, "for the purpose of effectually providing, by suitable treaty, for maintaining ample water levels for the uses of navigation in the Great Lakes and the waters connected therewith, by the construction of such controlling and remedial works in the connecting rivers and channels of such lakes as may be agreed upon by the said governments under the provisions of said treaty."

The falls and rapids are at the exit of the river from the lake. Millions of public money have already been expended in the construction of canals and locks, by this government upon the American side, and by the Canadian Government upon its own side of the rapids, as a means by which water craft may pass around the falls and rapids in the river. The commerce using these facilities has increased by leaps and bounds. The first canal had hardly been finished before it became inadequate. A second upon the American side was constructed parallel with the first. The two together are insufficient, though the canal upon the Canadian side accommodates much of the commerce. The main purpose of the act of 1909 was to clear the way for generally widening and enlarging facilities for the ever growing commerce of the Great Lakes. The act, therefore, looks to the construction of one or more canals and locks, paralleling those in use, and directs a survey "to ascertain and determine the proper plan, . . . for constructing in the rapids . . . a filling basin or forebay from which the ship locks may be filled."

The upland belonging to the Chandler-Dunbar Company consists of a strip of land some 2,500 feet long and from 50 to 150 feet wide. It borders upon the river on one side, and on the Government canal strip on the other. Under permits from the Secretary of War, revocable at will, it placed in the rapids, in connection with its upland facilities, the necessary dams, dykes and forebays for the purpose of controlling the current and using its power for commercial purposes, and has been for some years engaged in using and selling water power. What it did was by the revocable permission of the Secretary of War, and every such permit or license was revoked by the act of 1909. (See act of September 19, 1890, 26 Stat., pp. 426, 454, c. 907, forbidding the construction of any dam, pier or breakwater in any navigable river without permission of the Secretary of War, or the creation of any obstruction not affirmatively authorized by law, "to the navigable capacity of such rivers." See also the later act of March 3, 1899, 30 Stat., pp. 1151, 1155, c. 425, and *United States* v. *Rio Grande Irrigation Company*, 174 U. S. 690, construing and applying the act of 1890). That it did not thereby acquire any right to maintain these constructions in the river longer than the Government should continue the license, needs no argument. They were placed in the river under a permit which the company knew was likely to be revoked at any time. There is nothing in the facts which savors of estoppel in law or equity. The suggestion by counsel that the act of 1909 contemplates that the owner should be compensated not only for its tangible property, movable or real, but for its loss and damage by the discontinuance of the company's license and its exclusion from the right to use the water power inherent in the falls and rapids, for commercial purposes, is without merit. The provisions of the act in respect of compensation apply only to compensation for such "property described" as shall be held private property taken for

public uses. Unless, therefore, the water power rights asserted by the Chandler-Dunbar Company are determined to be private property the court below was not authorized to award compensation for such rights.

It is a little difficult to understand the basis for the claim that in appropriating the upland bordering upon this stretch of water, the Government not only takes the land but also the great water power which potentially exists in the river. The broad claim that the water power of the stream is appurtenant to the bank owned by it, and not dependent upon ownership of the soil over which the river flows has been advanced. But whether this private right to the use of the flow of the water and flow of the stream be based upon the qualified title which the company had to the bed of the river over which it flows or the ownership of land bordering upon the river, is of no prime importance. In neither event can there be said to arise any ownership of the river. Ownership of a private stream wholly upon the lands of an individual is conceivable; but that the running water in a great navigable stream is capable of private ownership is inconceivable.

Whatever substantial private property rights exist in the flow of the stream must come from some right which that company has to construct and maintain such works in the river, such as dams, walls, dykes, etc., essential to the utilization of the power of the stream for commercial purposes. We may put out of view altogether the class of cases which deal with the right of riparian owners upon a non-navigable stream to the use and enjoyment of the stream and its waters. The use of the fall of such a stream for the production of power may be a reasonable use consistent with the rights of those above and below. The necessary dam to use the power might completely obstruct the stream, but if the effect was not injurious to the property of those above or to the equal rights of those

below, none could complain, since no public interest would be affected. We may also lay out of consideration the cases cited which deal with the rights of riparian owners upon navigable or non-navigable streams as between each other. Nor need we consider cases cited which deal with the rights of riparian owners under state laws and private or public charters conferring rights. That riparian owners upon public navigable rivers have in addition to the rights common to the public certain rights to the use and enjoyment of the stream which are incident to such ownership of the bank, must be conceded. These additional rights are not dependent upon title to the soil over which the river flows, but are incident to ownership upon the bank. Among these rights of use and enjoyment is the right, as against other riparian owners, to have the stream come to them substantially in its natural state, both in quantity and quality. They have also the right of access to deep water, and when not forbidden by public law may construct for this purpose, wharves, docks, and piers in the shallow water of the shore. But every such structure in the water of a navigable river is subordinate to the right of navigation, and subject to the obligation to suffer the consequences of the improvement of navigation, and must be removed if Congress in the assertion of its power over navigation shall determine that their continuance is detrimental to the public interest in the navigation of the river. *Gibson* v. *United States*, 166 U. S. 269; *Transportation Co.* v. *Chicago*, 99 U. S. 635. It is for Congress to decide what is and what is not an obstruction to navigation; *Pennsylvania* v. *Wheeling Bridge Co.*, 18 How. 421; *Union Bridge Co.* v. *United States*, 204 U. S. 364; *Philadelphia Co.* v. *Stimson*, 223 U. S. 605.

To utilize the rapids and fall of the river which flows by the upland of the Chandler-Dunbar Company, it has been and will be necessary to construct and maintain in the river the structures necessary to control and direct

the flow so that it may be used for commercial purposes. The thirty-fourth finding of fact includes this:

"For about twenty years the Chandler-Dunbar Company, or its predecessors or someone claiming under it, has been developing power at this part of the rapids. This was accomplished by a short transverse dam near the lower boundary of its land extending out a short distance into the stream and then extending up along the bed of the stream (substantially) parallel to the bank up to the head of the rapids. This dam or wall toward its upper end diverged out into the stream the better to divert water into the headrace and into the forebay formed by its lower part. Earlier structures of this character were replaced about 1901 by those more extensive ones which existed when this condemnation was made. While considerable in extent and cost, they are inconsiderable as compared with the structures now proposed to utilize the whole power, and they were, comparatively speaking, along the bank rather than across the stream."

The seventy-first finding of fact was in these words:

"All the development works ever constructed upon the Chandler-Dunbar submerged lands by anyone, have been constructed after obtaining from the Secretary of War a permit therefor, and each such permit has been expressly revocable by right of revocation reserved on its face, to be exercised with or without cause. Each such permit was revoked before the commencement of this proceeding."

Upon what principle can it be said that in requiring the removal of the development works which were in the river upon sufferance, Congress has taken private property for public use without compensation? In deciding that a necessity existed for absolute control of the river at the rapids, Congress has of course excluded, until it changes the law, every such construction as a hindrance to its plans and purposes for the betterment of naviga-

tion. The qualified title to the bed of the river affords no ground for any claim of a right to construct and maintain therein any structure which Congress has by the act of 1909 decided in effect to be an obstruction to navigation, and a hindrance to its plans for improvement. That title is absolutely subordinate to the right of navigation and no right of private property would have been invaded if such submerged lands were occupied by structures in aid of navigation or kept free from such obstructions in the interest of navigation. *Scranton* v. *Wheeler*, *supra; Hawkins Light House Case*, 39 Fed. Rep. 77, 83. We need not consider whether the entire flow of the river is necessary for the purposes of navigation, or whether there is a surplus which is to be paid for, if the Chandler-Dunbar Company is to be excluded from the commercial use of that surplus. The answer is found in the fact that Congress has determined that the stream from the upland taken to the international boundary is necessary for the purposes of navigation. That determination operates to exclude from the river forever the structures necessary for the commercial use of the water power. That it does not deprive the Chandler-Dunbar Company of private property rights follows from the considerations before stated.

It is said that the twelfth section of the act of 1909 authorizes the Secretary of War to lease upon terms agreed upon, any excess of water power which results from the conservation of the flow of the river, and the works which the Government may construct. This it is said is a taking of private property for commercial uses and not for the improvement of navigation. But aside from the exclusive public purpose declared by the eleventh section of the act, the twelfth section declares that the conservation of the flow of the river is "primarily for the benefit of navigation, and incidentally for the purpose of having the water power developed, either for the direct

use of the United States, or by lease . . . through the Secretary of War." If the primary purpose is legitimate, we can see no sound objection to leasing any excess of power over the needs of the Government. The practice is not unusual in respect to similar public works constructed by state governments. In *Kaukauna Co.* v. *Green Bay &c. Canal*, 142 U. S. 254, 273, respecting a Wisconsin act to which this objection was made, the court said:

"But, if, in the erection of a public dam for a recognized public purpose, there is necessarily produced a surplus of water, which may properly be used for manufacturing purposes, there is no sound reason why the State may not retain to itself the power of controlling or disposing of such water as an incident of its right to make such improvement. Indeed, it might become very necessary to retain the disposition of it in its own hands, in order to preserve at all times a sufficient supply for the purposes of navigation. If the riparian owners were allowed to tap the pond at different places, and draw off the water for their own use, serious consequences might arise, not only in connection with the public demand for the purposes of navigation, but between the riparian owners themselves as to the proper proportion each was entitled to draw—controversies which could only be avoided by the State reserving to itself the immediate supervision of the entire supply. As there is no need of the surplus running to waste, there was nothing objectionable in permitting the State to let out the use of it to private parties, and thus reimburse itself for the expenses of the improvement."

It is at best not clear how the Chandler-Dunbar Company can be heard to object to the selling of any excess of water power which may result from the construction of such controlling or remedial works as shall be found advisable for the improvement of navigation, inasmuch as

it had no property right in the river which has been "taken." It has, therefore, no interest whether the Government permit the excess of power to go to waste or made the means of producing some return upon the great expenditure.

The conclusion therefore is that the court below erred in awarding $550,000, or any other sum for the value of what is called "raw water," that is the present money value of the rapids and falls to the Chandler-Dunbar Company as riparian owners of the shore and appurtenant submerged land.

Coming now to the award for the upland taken:

The court below awarded to the Chandler-Dunbar Company on this account—

a. For the narrow strip of upland bordering on the river, having an area of something more than 8 acres, excluding the small parcels described in the pleadings and judgment as claims 95 and 96, $65,000, less 7% of that sum on account of Portage Street, which the court later found belonged to the United States and not to that company $60,450

b. For the small parcels covered by claims 95 and 96..... 25,000

c. For a half interest in lot on bridge property. 338

These awards include certain sums for special values: The value of the upland strip fixed at $60,450 was arrived at in this manner—

a. For its value, including railroad side tracks, buildings and cable terminal, including also its use, "wholly disconnected with power development or public improvement, that is to say, for all general purposes, like residences, or hotels, factory sites, disconnected with water power etc., $20,000."

b. "For use as factory site in connection with the development of 6,500 horse power, either as a single site or for several factories to use the surplus of 6,500 horse

power not now used in the city, an additional value of $20,000.

c. For use for canal and lock purposes, an additional value of $25,000.

The small parcels constituting claims 95 and 96 were valued at $25,000.

These two parcels seem to have been connected by a costly fill. They fronted upon deep water above the head of the rapids. They had therefore a special value for wharfs, docks, etc., and had been so used. The gross sum awarded included the following elements:

a. For general wharfage, dock and warehouse purposes, disconnected with development of power in the rapids, $10,000.

b. For its special value for canal and lock purposes an additional sum of $10,000.

c. In connection with the canal along the rapids, if used as a part of the development of 4,500 (6,500) horse power, an additional value of $5,000.

The United States excepted to the additional value allowed in consequence of the availability of these parcels in connection with the water power supposed to be the property of the Chandler-Dunbar Company, and supposed to have been taken by the Government in this case. It also excepted to so much of the awards as constituted an additional value by reason of availability for lock and canal purposes.

These exceptions so far as they complain of the additional value to be attached to these parcels for use as factory sites in connection with the development of horse power by the Chandler-Dunbar Company, must be sustained. These "additional" values were based upon the erroneous hypothesis that that company had a private property interest in the water power of the river, not possibly needed now or in the future for purposes of navigation, and that that excess or surplus water was capable,

by some extension of their works already in the river, of producing 6,500 horse power.

Having decided that the Chandler-Dunbar Company as riparian owners had no such vested property right in the water power inherent in the falls and rapids of the river, and no right to place in the river the works essential to any practical use of the flow of the river, the Government cannot be justly required to pay for an element of value which did not inhere in these parcels as upland. The Government had dominion over the water power of the rapids and falls and cannot be required to pay any hypothetical additional value to a riparian owner who had no right to appropriate the current to his own commercial use. These additional values represent, therefore, no actual loss and there would be no justice in paying for a loss suffered by no one in fact. "The requirement of the Fifth Amendment is satisfied when the owner is paid for what is taken from him. The question is what has the owner lost, and not what has the taker gained." *Boston Chamber of Commerce* v. *Boston*, 217 U. S. 189, 194, 195.

Neither can consideration be given to probable advancement in the value of such riparian property by reason of the works to be constructed in the river by the Government, or the use to which the flow of the stream might be directed by the Government. The value should be fixed as of the date of the proceedings and with reference to the loss the owner sustains, considering the property in its condition and situation at the time it is taken and not as enhanced by the purpose for which it was taken. *Kerr* v. *Park Commissioners*, 117 U. S. 379, 387; *Shoemaker* v. *United States*, 147 U. S. 282, 304, 305.

The exception taken to the inclusion as an element of value of the availability of these parcels of land for lock and canal purposes must be overruled. That this land had a prospective value for the purpose of constructing

a canal and lock parallel with those in use had passed beyond the region of the purely conjectural or speculative. That one or more additional parallel canals and locks would be needed to meet the increasing demands of lake traffic was an immediate probability. This land was the only land available for the purpose. It included all the land between the canals in use and the bank of the river. Although it is not proper to estimate land condemned for public purposes by the public necessities or its worth to the public for such purpose, it is proper to consider the fact that the property is so situated that it will probably be desired and available for such a purpose. Lewis on Eminent Domain, § 707. *Boom Co.* v. *Patterson*, 98 U. S. 403, 408; *Shoemaker* v. *United States*, 147 U. S. 282; *Young* v. *Harrison*, 17 Georgia, 30; *Alloway* v. *Nashville*, 88 Tennessee, 510; *Sargent* v. *Merrimac*, 196 Massachusetts, 171. *Boom Company* v. *Patterson* was this: A boom company sought to condemn three small islands in the Mississippi river so situated with reference to each other and the river bank as to be peculiarly adapted to form a boom a mile in length. The question in the case was whether their adaptability for that purpose gave the property a special value which might be considered. This court held that the adaptability of the land for the purposes of a boom was an element which should be considered in estimating the value of the lands condemned. The court said, touching the rule for estimating damages in such cases:

"So many and varied are the circumstances to be taken into account in determining the value of property condemned for public purposes, that it is perhaps impossible to formulate a rule to govern its appraisement in all cases. Exceptional circumstances will modify the most carefully guarded rule; but, as a general thing, we should say that the compensation to the owner is to be estimated by reference to the uses for which the property is suitable, having regard to the existing business or wants of the community,

or such as may be reasonably expected in the immediate future."

In *Shoemaker* v. *United States, supra*, lands were condemned for park purposes. In the court below the commissioners were instructed to estimate each piece of land at its market value and that, "the market value of the land includes its value for any use to which it may be put, and all the uses to which it is adapted, and not merely the condition in which it is at the present time, and the use to which it is now applied by the owner; . . . that if, by reason of its location, its surroundings, its natural advantages, its artificial improvement or its intrinsic character, it is peculiarly adapted to some particular use—e. g., to the use of a public park—all the circumstances which make up this adaptability may be shown, and the fact of such adaptation may be taken into consideration in estimating the compensation." The court approved this instruction.

The Chandler-Dunbar Company has also assigned as error the denial of any award on account of a portion of Portage Street to which it claimed title. The title to that parcel has never passed out of the United States. It was part of a street laid off by a survey made of the village of Sault Sainte Marie, a town which had grown up on public land of the United States. But that survey was never carried into a patent and the village never accepted this part of the street. Thus abandoned, it was occupied for a time by the Chandler-Dunbar Company, but not long enough to acquire title. The court did not err in holding that the company had acquired no title, and that title was already in the United States.

The award to the St. Marys Power Company, as owner of island No. 5 is excepted to. The value of that island was fixed at $21,000. That amount was reached, as shown by the 70th finding of fact, in this manner:

a. As a base value, for general purposes, as for a cottage or fishing station..... $1,000

b. As a strategic value, growing out of the extent to which it may control or block the most available development by up stream owners..... $15,000

c. As an additional value, by reason of its special suitability for lock or canal purposes"..... $5,000

This island No. 5, otherwise known as Oshawano Island, is on the American edge of the rapids and below the Chandler-Dunbar property, and opposite that part of the shore belonging to the United States. It has an area of about one-third of an acre. The court found that it had no appreciable water power which was in any sense appurtenant, and so no allowance was made on that account. Because none was made the St. Marys Power Company sued out a writ of error. The reasons which have induced us to deny such an allowance in respect of upland upon the bank of the river, require the assignment referred to to be held bad. The court below held, however, that the island had value in other ways, being those mentioned above. In respect to the allowance of $15,000 as its "strategic value," the court below in its opinion said:

"Owing to its location, this property has, and always has had, a strategic value with reference to any general scheme of water development in the river and because it must be included as a tail race site, if not otherwise, in any completely efficient plan of development by any owner, private or public. This value is denied, because it is, as Government counsel say, of the 'hold up' character. It should not be permitted to assume the latter character, nor should the fair strategic value be denied because there might be an attempt at exaggeration or abuse. I fix this so-called strategic value at $10,000

(afterwards raised to $15,000), and it should be awarded under the circumstances of this case to whomsoever the owner may be."

This allowance has no solid basis upon which it may stand. That the property may have to the public a greater value than its fair market value affords no just criterion for estimating what the owner should receive. It is not proper to attribute to it any part of the value which might result from a consideration of its value as a necessary part of a comprehensive system of river improvement which should include the river and the upland upon the shore adjacent. The ownership is not the same. The principle applied in *Boston Chamber of Commerce* v. *Boston*, 217 U. S. 189, is applicable. In that case it appeared that one person owned the land condemned subject to servitudes to others. It was sought to have damages assessed upon a bill in which all of the interests joined for the purpose of having a lump sum awarded to be divided as the parties might or had agreed. If this could be done it was agreed that the estate, considered as the sole unencumbered estate of a single person, was worth many times more than if the damage should be assessed according to the condition of the title at the time. This court held that the requirement of compensation when land is taken for a public purpose "does not require a disregard of the mode of ownership. It does not require a parcel of land to be valued as an unencumbered whole."

The "Strategic Value" for which $15,000 has been allowed is altogether speculative. It is based not upon the actual market value for all reasonable uses and demands, but the possible worth of the property to the Government.

A "strategic value" might be realized by a price fixed by the necessities of one person buying from another, free to sell or refuse as the price suited. But in a condemna-

tion proceeding, the value of the property to the Government for its particular use is not a criterion. The owner must be compensated for what is taken from him, but that is done when he is paid its fair market value for all available uses and purposes. Lewis Eminent Domain, 3d ed., § 706; *Moulton* v. *Newburyport Water Co.*, 137 Massachusetts, 163, 167; *United States* v. *Seufert Bros. Co.*, 78 Fed. Rep. 520; *Alloway* v. *Nashville*, 88 Tennessee, 510, 514; *United States* v. *Honolulu Co.*, 122 Fed. Rep. 581.

The exception must be sustained.

One other assignment by the St. Marys Power Company needs to be specially noticed. The title to Oshawano Island is in ligitation between the United States and the St. Marys Power Company. For this reason the award to that company was ordered to remain in the registry of the court until that litigation was ended. The St. Marys Power Company contends that when the United States sought the condemnation of the property in this proceeding it thereby conceded the title to be in it. But the pleadings show that no such concession was made. The state of the title and of the pending litigation was set up and we think all rights were thereby reserved.

The assignments of error by the Michigan Lake Superior Power Company must be overruled. No property, real or hypothetical, has been taken from it.

Other assignments of error by one or another of the several plaintiffs in error need not be specially noticed. They are all overruled as either covered by the views we have expressed, or as having no merit.

The judgment of the court below must be reversed and the cases remanded with direction to enter a judgment in accordance with this opinion.